

**CITY OF TIGARD, OREGON**

**ORDINANCE NO. 02- 33**

**AN ORDINANCE ADOPTING CHANGES TO THE DEVELOPMENT CODE IN ORDER TO IMPLEMENT THE TRANSPORTATION SYSTEM PLAN (TSP).**

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**WHEREAS**, the TSP was developed with the help of a 12 member citizen Task Force and addressed Transportation Planning Rule (TPR) requirements, Metro's Regional Transportation Plan (RTP) updates and the City needs; and

**WHEREAS**, Tigard adopted its Transportation System Plan in January 2002 with the intent to return at a later date with amendments to the development code; and

**WHEREAS**, the TSP is not fully implemented until changes have been made to the development code; and

**WHEREAS**, development code changes have been prepared which implement the TSP recommendations, address TPR narrow street requirements and clarify existing code language as shown in Exhibits A-1 through A-4; and

**WHEREAS**, the Planning Commission held a public hearing, which was noticed in accordance with the City standards, on August 5, 2002 and voted to forward the amendments to the City Council, and

**WHEREAS**, the Citizen Involvement Team was informed of the proposed changes and of the City Council hearing at its September 5, 2002 meeting; and

**WHEREAS**, the City Council held a public hearing on September 10, 2002, which was noticed in accordance with City standards, and voted to approve the TSP and Comprehensive Plan changes proposed, and

**WHEREAS**, the decision to adopt was based on compliance with Oregon Statewide Planning Goals #1, #2, and #12; OAR 660; the Regional Transportation Plan, Comprehensive Plan policies 1.1.1(a), 2.1.1, 8.1.1, 8.1.2, 8.1.3, 8.1.5 and 8.2.3 and Community Development Code chapter 18.380.020 and 18.390.060.G as detailed in the TPR compliance matrix (Exhibit B) and the staff report/Planning Commission recommendation (Exhibit C),


**NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:**

**SECTION 1:** The attached Development Code Changes (Exhibit A-1 through A-4) are adopted based on the findings in the staff report and the supplemental TPR compliance matrix.


**SECTION 2:** If any section of the TSP or resulting Development Code changes trigger a Measure 7 claim, the City may make a determination regarding whether the TSP or Development Code provision should be applied on a case by case basis.

**SECTION 3:** This ordinance shall be effective 30 days after its passage by the Council, signature by the Mayor, and posting by the City Recorder.

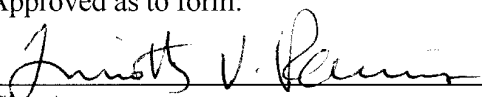
**PASSED:** By unanimous vote of all Council members present after being read by number and title only, this 10<sup>th</sup> day of September, 2002.

  
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~~Catherine Wheatley, City Recorder~~  
Greer A. Gaston, Deputy City Recorder

**APPROVED:** By Tigard City Council this 10<sup>th</sup> day of September, 2002.

  
\_\_\_\_\_  
James E. Griffith, Mayor

Approved as to form:

  
\_\_\_\_\_  
City Attorney

9/10/02  
\_\_\_\_\_  
Date

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## Chapter 18.705 ACCESS, EGRESS, AND CIRCULATION

### Sections:

- 18.705.010 Purpose**  
**18.705.020 Applicability of Provisions**  
**18.705.030 General Provisions**

### **18.705.010 Purpose**

- A. Purpose. The purpose of this chapter is to establish standards and regulations for safe and efficient vehicle access and egress on a site and for general circulation within the site.

### **18.705.020 Applicability of Provisions**

- A. When provisions apply. The provisions of this chapter shall apply to all development including the construction of new structures, the remodeling of existing structures (see Section 18.360.050), and to a change of use which increases the on-site parking or loading requirements or which changes the access requirements.
- B. Change or enlargement of use. Should the owner or occupant of a lot or building change or enlarge the use to which the lot or building is put, thereby increasing access and egress requirements, it is unlawful and is a violation of this title to begin or maintain such altered use until the provisions of this chapter have been met if required or until the appropriate approval authority has approved the change.
- C. When site design review is not required. Where the provisions of Chapter 18.360, Site Development Review, do not apply, the Director shall approve, approve with conditions, or deny an access plan submitted under the provisions of this chapter in conjunction with another permit or land use action.
- D. Conflict with subdivision requirements. The requirements and standards of this chapter shall not apply where they conflict with the subdivision rules and standards of this title.

### **18.705.030 General Provisions**

- A. Continuing obligation of property owner. The provisions and maintenance of access and egress stipulated in this title are continuing requirements for the use of any structure or parcel of real property in the City.
- B. Access plan requirements. No building or other permit shall be issued until scaled plans are presented and approved as provided by this chapter that show how access, egress and circulation requirements are to be fulfilled. The applicant shall submit a site plan. The Director shall provide the applicant with detailed information about this submission requirement.
- C. Joint access. Owners of two or more uses, structures, or parcels of land may agree to utilize jointly the same access and egress when the combined access and egress of both uses, structures, or parcels of land satisfies the combined requirements as designated in this title, provided:
1. Satisfactory legal evidence shall be presented in the form of deeds, easements, leases or contracts to establish the joint use; and

2. Copies of the deeds, easements, leases or contracts are placed on permanent file with the City.
- D. Public street access. All vehicular access and egress as required in Sections 18.705.030H and 18.705.030I shall connect directly with a public or private street approved by the City for public use and shall be maintained at the required standards on a continuous basis.
- E. Curb cuts. Curb cuts shall be in accordance with Section 18.810.030N.
- F. Required walkway location. On-site pedestrian walkways shall comply with the following standards:
1. Walkways shall extend from the ground floor entrances or from the ground floor landing of stairs, ramps, or elevators of all commercial, institutional, and industrial uses, to the streets which provide the required access and egress. Walkways shall provide convenient connections between buildings in multi-building commercial, institutional, and industrial complexes. Unless impractical, walkways shall be constructed between new and existing developments and neighboring developments;
  2. Within all attached housing (except two-family dwellings) and multi-family developments, each residential dwelling shall be connected by walkway to the vehicular parking area, and common open space and recreation facilities;
  3. Wherever required walkways cross vehicle access driveways or parking lots, such crossings shall be designed and located for pedestrian safety. Required walkways shall be physically separated from motor vehicle traffic and parking by either a minimum 6-inch vertical separation (curbed) or a minimum 3-foot horizontal separation, except that pedestrian crossings of traffic aisles are permitted for distances no greater than 36 feet if appropriate landscaping, pavement markings, or contrasting pavement materials are used. Walkways shall be a minimum of four feet in width, exclusive of vehicle overhangs and obstructions such as mailboxes, benches, bicycle racks, and sign posts, and shall be in compliance with ADA standards;
  4. Required walkways shall be paved with hard surfaced materials such as concrete, asphalt, stone, brick, etc. Walkways may be required to be lighted and/or signed as needed for safety purposes. Soft-surfaced public use pathways may be provided only if such pathways are provided in addition to required pathways.
- G. Inadequate or hazardous access.
1. Applications for building permits shall be referred to the Commission for review when, in the opinion of the Director, the access proposed:
    - a. Would cause or increase existing hazardous traffic conditions; or
    - b. Would provide inadequate access for emergency vehicles; or
    - c. Would in any other way cause hazardous conditions to exist which would constitute a clear and present danger to the public health, safety, and general welfare.
  2. Direct individual access to arterial or collector streets from single-family dwellings and duplex lots shall be discouraged. Direct access to collector or arterial streets shall be considered only

if there is no practical alternative way to access the site. If direct access is permitted by the City, the applicant will be required to mitigate for any safety or neighborhood traffic management (NTM) impacts deemed applicable by the City Engineer. This may include, but will not be limited to, the construction of a vehicle turnaround on the site to eliminate the need for a vehicle to back out onto the roadway.

3. In no case shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley. Single-family and duplex dwellings are exempt from this requirement.

#### H. Access Management

1. An access report shall be submitted with all new development proposals which verifies design of driveways and streets are safe by meeting adequate stacking needs, sight distance and deceleration standards as set by ODOT, Washington County, the City and AASHTO (depending on jurisdiction of facility.)
2. Driveways shall not be permitted to be placed in the influence area of collector or arterial street intersections. Influence area of intersections is that area where queues of traffic commonly form on approach to an intersection. The minimum driveway setback from a collector or arterial street intersection shall be 150 feet, measured from the right-of-way line of the intersecting street to the throat of the proposed driveway. The setback may be greater depending upon the influence area, as determined from City Engineer review of a traffic impact report submitted by the applicant's traffic engineer. In a case where a project has less than 150 feet of street frontage, the applicant must explore any option for shared access with the adjacent parcel. If shared access is not possible or practical, the driveway shall be placed as far from the intersection as possible.
3. The minimum spacing of driveways and streets along a collector shall be 200 feet. The minimum spacing of driveways and streets along an arterial shall be 600 feet.
4. The minimum spacing of local streets along a local street shall be 125 feet.

#### I. Minimum access requirements for residential use.

1. Vehicular access and egress for single-family, duplex or attached single-family dwelling units on individual lots and multi-family residential uses shall not be less than as provided in Table 18.705.1 and Table 18.705.2;

**TABLE 18.705.1**  
**VEHICULAR ACCESS/EGRESS REQUIREMENTS:**  
**RESIDENTIAL USE (6 OR FEWER UNITS)**

Number Dwelling Unit/Lots	Minimum Number of Driveways Required	Minimum Access Width	Minimum Pavement Width
1 or 2	1	15'	10'
3-6	1	20'	20'

**TABLE 18.705.2**  
**VEHICULAR ACCESS/EGRESS REQUIREMENTS:**  
**MULTI-FAMILY RESIDENTIAL USE**

<b>Dwelling Units</b>	<b>Minimum Number of Driveways Required</b>	<b>Minimum Access Required</b>	<b>Minimum Pavement Sidewalks, Etc.</b>
1-2	1	15'	10'
3-19	1	30'	24' if two-way, 15' if one-way: Curbs and 5' walkway required
20-49	1 or 2	30'  30'	24' if two-way  15' if one-way: Curbs and 5' walkway required
50-100	2	30'	24' Curbs and 5' walkway required

2. Vehicular access to multi-family structures shall be brought to within 50 feet of the ground floor entrance or the ground floor landing of a stairway, ramp, or elevator leading to the dwelling units;
  3. Private residential access drives shall be provided and maintained in accordance with the provisions of the Uniform Fire Code;
  4. Access drives in excess of 150 feet in length shall be provided with approved provisions for the turning around of fire apparatus by one of the following:
    - a. A circular, paved surface having a minimum turn radius measured from center point to outside edge of 35 feet;
    - b. A hammerhead-configured, paved surface with each leg of the hammerhead having a minimum depth of 40 feet and a minimum width of 20 feet;
    - c. The maximum cross slope of a required turnaround is 5%.
  5. Vehicle turnouts, (providing a minimum total driveway width of 24 feet for a distance of at least 30 feet), may be required so as to reduce the need for excessive vehicular backing motions in situations where two vehicles traveling in opposite directions meet on driveways in excess of 200 feet in length;
  6. Where permitted, minimum width for driveway approaches to arterials or collector streets shall be no less than 20 feet so as to avoid traffic turning from the street having to wait for traffic exiting the site.
- J. Minimum access requirements for commercial and industrial use.
1. Vehicle access, egress and circulation for commercial and industrial use shall not be less than 21 as provided in Table 18.705.3;

**TABLE 18.705.3  
VEHICULAR ACCESS/EGRESS REQUIREMENTS:  
COMMERCIAL AND INDUSTRIAL USES**

<b>Required Parking Spaces</b>	<b>Minimum Number of Driveways Required</b>	<b>Minimum Access Width</b>	<b>Minimum Pavement</b>
0-99	1	30'	24' curbs required
100+	2 or 1	30'  50'	24' curbs required  40' curbs required

2. Vehicular access shall be provided to commercial or industrial uses, and shall be located to within 50 feet of the primary ground floor entrances;
  3. Additional requirements for truck traffic may be placed as conditions of site development review.
- K. One-way vehicular access points. Where a proposed parking facility indicates only one-way traffic flow on the site, it shall be accommodated by a specific driveway serving the facility; the entrance drive shall be situated closest to oncoming traffic and the exit drive shall be situated farthest from oncoming traffic.
- L. Director's authority to restrict access. The Director has the authority to restrict access when the need to do so is dictated by one or more of the following conditions:
1. To provide for increased traffic movement on congested streets and to eliminate turning movement problems, the Director may restrict the location of driveways on streets and require the location of driveways be placed on adjacent streets, upon the finding that the proposed access would:
    - a. Cause or increase existing hazardous traffic conditions; or
    - b. Provide inadequate access for emergency vehicles; or
    - c. Cause hazardous conditions to exist which would constitute a clear and present danger to the public health, safety, and general welfare.
  2. To eliminate the need to use public streets for movements between commercial or industrial properties, parking areas shall be designed to connect with parking areas on adjacent properties unless not feasible. The Director shall require access easements between properties where necessary to provide for parking area connections;
  3. To facilitate pedestrian and bicycle traffic, access and parking area plans shall provide efficient sidewalk and/or pathway connections, as feasible, between neighboring developments or land uses;
  4. A decision by the Director per 18.705.030 K.1.-3. above may be appealed by means of a Type II procedure, as regulated by Section 18.390.040, using criteria contained in Section 18.370.020 C3

**Chapter 18.730**  
**EXCEPTIONS TO DEVELOPMENT STANDARDS**

**Sections:**

- 18.730.010 Purpose**  
**18.730.020 Exceptions to Building Height Limitations**  
**18.730.030 Zero Lot Line Setback Standards**  
**18.730.040 Additional Setback Requirements**  
**18.730.050 Miscellaneous Requirements and Exceptions**

**18.730.010 Purpose**

- A. Purpose. The purpose of this chapter is to present exceptions to the height and setback standards which apply in various zoning districts as detailed in Chapters 18.510, 18.520 and 18.530. Flexible and/or more stringent setback standards are designed to allow for the maximum use of land and to allow for a varied building layout pattern while ensuring there will be adequate open space, light, air and distance between buildings to protect public health and safety.

**18.730.020 Exceptions to Building Height Limitations**

- A. Projections not used for human habitation. Projections such as chimneys, spires, domes, elevator shaft housings, towers excluding TV dish receivers, aerials, flag poles, and other similar objects not used for human occupancy, are not subject to the building height limitations of this title.
- B. Building height exceptions. Any building located in a non-residential zone may be built to a maximum height of 75 feet; provided:
1. The total floor area of the building does not exceed 1-1/2 times the area of the site;
  2. The yard dimensions in each case are equal to at least 1/2 of the building height of the primary structure; and
  3. The structure is not abutting a residential zoning district.
- C. Building heights and flag lots.
1. Limitations on the placement of residential structures on flag lots apply when any of the following exist:
    - a. A flag lot was created prior to April 15, 1985;
    - b. A flag lot is created after April 15, 1985 by an approved partition; or
    - c. A flag lot is created by the approval of a subdivision and the flag lot is located on the periphery of the subdivision so that the lot adjoins other residentially-zoned land.
  2. The maximum height for an attached or detached single-family, duplex, or multiple-family residential structure on a flag lot or a lot having sole access from an accessway, private drive or easement is 1-1/2 stories or 25 feet, whichever is less, except that the maximum height may be 2-1/2 stories or 35 feet, whichever is less, provided:



- a. The proposed dwelling otherwise complies with the applicable dimensional requirements of the zoning district;
  - b. A 10 feet side yard will be preserved;
  - c. A residential structure on any abutting lot either is located 50 feet or more from the nearest point of the subject dwelling, or the residential structure exceeds 1-1/2 stories or 25 feet in height on any abutting lot; and
  - d. Windows 15 feet or more above grade shall not face dwelling unit windows or patios on any abutting lot unless the proposal includes an agreement to plant trees capable of mitigating direct views, or that such trees exist and will be preserved.
3. Where an agreement is made to plant trees capable of mitigating direct views, the agreement shall be deemed a condition of approval under the provisions of Section 18.390.030 D.
  4. The tree planting agreement shall be a condition of Chapter 18.360, Site Development Review, for three or more attached units or a multiple-family residential structure, or, at the time of issuance of building permits, for single detached units, one duplex or two attached residential units.

#### **18.730.030 Zero Lot Line Setback Standards**

A. Applicability and limitations. The provisions of this chapter apply to the R-4.5 and R-7 zoning districts and are limited to single-family detached dwelling units. The provisions of this chapter shall be applied in conjunction with:

1. An application for planned development approval under the provisions of Chapter 18.350, Planned Development;
2. An application for subdivision approval under the provisions of Chapter 18.430, Subdivision; or
3. An application for partitioning approval under the provisions of Chapter 18.420, Partition.

B. Approval criteria and conditions.

1. The approval authority shall approve, approve with conditions or deny an application for a zero lot line development based on findings that:
  - a. There shall be a 10-foot separation between each residential dwelling structure or garage;
  - b. No residential dwelling shall be placed on a lot line which is common to a lot line which is not a part of the overall development;
  - c. No structure shall be placed on a lot line which is common to a public or private road right-of-way or easement line; and
  - d. A five-foot non-exclusive maintenance easement shall be delineated on the plan for each lot having a zero setback area;

- (1) The easement shall be on the adjacent lot and shall describe the maintenance requirements for the zero lot line wall, or deed restrictions must be submitted with the preliminary plat which addresses the maintenance requirements for the zero setback wall of the detached dwellings; and
  - (2) The easement shall be recorded with Washington County and submitted to the City with the recorded final plat prior to the issuance of any building permits within the development.
2. The approval authority requires the following conditions to be satisfied:
- a. Deed restrictions shall be recorded with Washington County which ensure that:
    - (1) The 10-foot separation between the residential structures shall remain in perpetuity; and
    - (2) The 10-foot separation between the residential structures shall be maintained free from any obstructions other than:
      - (a) The eaves of the structure;
      - (b) A chimney which may encroach into the setback area by not more than two feet;
      - (c) A swimming pool;
      - (d) Normal landscaping; or
      - (e) A garden wall or fence equipped with a gate for emergency access and maintenance purposes.
  - b. Easements shall be granted where any portion of the structure or architectural feature projects over a property line; and
  - c. The maximum lot coverage for zero lot line shall not exceed the maximum lot coverage for the base zone.
- C. Application submission requirements. All applications shall be made on forms provided by the Director in accordance with Chapter 18.350, Planned Developments, Chapter 18.430, Subdivisions, or Chapter 18.420, Partitions, and shall be accompanied by:
1. Copies of the plat plan indicating building and easement location and dimensions, and necessary data or narrative which explains how the development conforms to the standards;
  2. A list of names and addresses of all property owners of record immediately abutting the site;
  3. All other requirements of Chapters 18.350, 18.430 and 18.420 shall apply.

#### **18.730.040 Additional Setback Requirements**

- A. Additional setback from specified roadways. ~~To ensure improved light, air, and sight distance and to protect the public health, safety, and welfare, structures in any zoning district which abut certain arterial and collector streets shall be set back a minimum distance from the centerline of the street.~~

Where the street is not improved, the measurement shall be made at right angles from the centerline or general extension of the street right of way:

1. Arterial Streets. The required setback distance for buildings on arterial streets is the setback distance required by the zoning district plus the following distances measured from the centerline of the street as contained in Table 18.730.1.
2. Collector Streets. The required setback distance for buildings on the following collector streets is the setback distance required by the zoning district plus 30 feet measured from the centerline of the street as contained in Table 18.730.1.

**TABLE 18.730.1**  
**ADDITIONAL CENTERLINE SETBACK REQUIREMENTS**

<b>Street Names</b>	<b>Requirement</b>
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Arterial Streets:

SW Pacific Highway (within City Limits)	50 feet
SW Hall Boulevard	45 feet
SW Scholls Ferry Road (except between its intersections with Old Scholls Ferry Road)	50 feet
SW Durham Road (between Hall Boulevard and Upper Boones Ferry)	45 feet
SW Upper Boones Ferry Road	45 feet

Collector Streets:

SW Ash Avenue	30 feet
SW Atlanta Haines (east of 68th Avenue)	30 feet
SW Atlanta (west of 68th Avenue)	30 feet
SW Beef Bend Road	30 feet
SW Bonita Road	30 feet
SW Bull Mountain Road	30 feet
SW Burnham Street	30 feet
SW Cascade Boulevard	30 feet
SW Commercial Street	30 feet
SW Durham Road (between Pacific Highway and Hall Boulevard)	30 feet
SW Franklin Street	30 feet
SW Gaarde Street	30 feet
SW Grant Avenue	30 feet
SW Greenburg Road	30 feet
SW Hunziker Road	30 feet
SW Main Street	30 feet
SW McDonald Street	30 feet
SW Murdock Street	30 feet
SW North Dakota Avenue	30 feet
SW Oak (west of Hall Boulevard)	30 feet
SW Pfaffle Street	30 feet
SW Sattler Street (40 ft pavement between 100th/Hall)	30 feet
SW Scholls Ferry (between its intersections with Old Scholls Ferry Road)	30 feet

**TABLE 18.730.1 (CON'T)**  
**ADDITIONAL CENTERLINE SETBACK REQUIREMENTS**

Street Names	Requirement
SW Summerfield Drive	30 feet
SW Tiedeman Avenue	30 feet
SW Tigard Street	30 feet
SW Walnut Street	30 feet
SW 68th Avenue	30 feet
SW 68th Avenue (south of Pacific Highway)	30 feet
SW 70th Avenue (south of Pacific Highway)	30 feet
SW 72nd Avenue	30 feet
SW 97th Avenue	30 feet
SW 98th Avenue	30 feet
SW 110th Avenue	30 feet
SW 121st Avenue	30 feet
Planned, SW Dartmouth to Pfaffle connection	30 feet
Planned, SW Hampton to 69th (westerly loop road)	30 feet

3.— The minimum yard requirement shall be increased in the event a yard abuts a street having a right-of-way width less than required by its functional classification on the City's transportation plan map and, in such case, the setback shall be not less than the setback required by the zone plus one-half of the projected road width as shown on the transportation map.

~~4.— The minimum distance from the wall of any structure to the centerline of an abutting street, however, shall not be less than 25 feet plus the yard required by the zone. This provision shall not apply to rights of way of 50 feet or greater in width.~~

**B. Distance between multi-family residential structure and other structures on site.**

1. To provide privacy, light, air, and access to the multiple and attached residential dwellings within a development, the following separations shall apply:
  - a. Buildings with windowed walls facing buildings with windowed walls shall have a 25-foot separation;
  - b. Buildings with windowed walls facing buildings with a blank wall shall have a 15-foot separation;
  - c. Buildings with opposing blank walls shall have a 10-foot separation;
  - d. Building separation shall also apply to buildings having projections such as balconies, bay windows and room projections; and
  - e. Buildings with courtyards to maintain separation of opposing walls as listed in Subsections 1-3 above for walls in separate buildings.

2. Where buildings exceed a horizontal dimension of 60 feet or exceed 30 feet in height, the minimum wall separation shall be one foot for each 15 feet of building length over 50 feet and two feet for each 10 feet of building height over 30 feet.
3. Driveways, parking lots, and common or public walkways shall maintain the following separation for dwelling units within eight feet of the ground level:
  - a. Driveways and parking lots shall be separated from windowed walls by at least eight feet; walkways running parallel to the face of the structures shall be separated by at least five feet; and
  - b. Driveways and parking lots shall be separated from living room windows by at least 10 feet; walkways running parallel to the face of the structure shall be separated by at least seven feet.
- C. When no yard setback is required. In zoning districts where a side yard or a rear yard setback is not required, a structure which is not to be built on the property line shall be set back from the property line by a distance in accordance with the Uniform Building Code requirements.

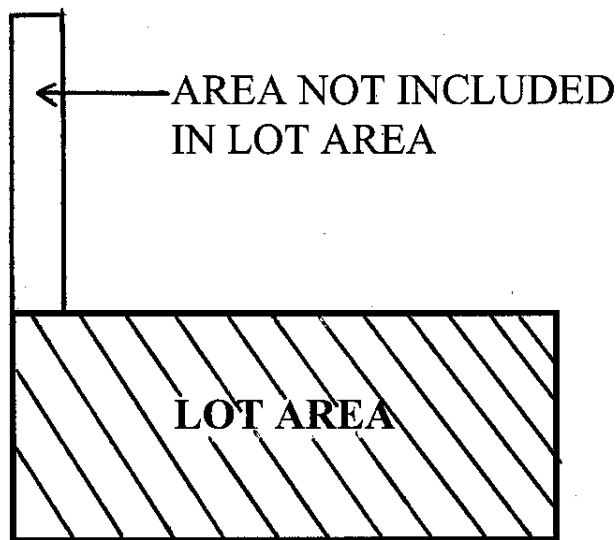
#### **18.730.050 Miscellaneous Requirements and Exceptions**

- A. When abutting properties have non-conforming front setbacks. If there are dwellings on both abutting lots with front yard depths less than the required depth for the zone, the depth of the front yard for the intervening lot need not exceed the average depth of the front yards of the abutting lots.
- B. When one abutting property has a non-conforming front setback. If there is a dwelling on one abutting lot with a front yard of less depth than the required depth for the zone, the front yard for the lot need not exceed a depth one-half way between the depth of the abutting lot and the required front yard depth.
- C. Storage in front yard. Boats, trailers, campers, camper bodies, house trailers, recreation vehicles or commercial vehicles in excess of 3/4 ton capacity may be stored in a required front yard in a residential zone subject to the following:
  1. No such unit shall be parked in a visual clearance area of a corner lot or in the visual clearance area of a driveway which would obstruct vision from an adjacent driveway or street;
  2. No such unit shall be used for dwelling purposes except that one camper, house trailer or recreational vehicle may be used for sleeping purposes only by friends, relatives or visitors on land entirely owned by or leased to the host person for a period not to exceed 14 days in one calendar year, provided that such unit shall not be connected to any utility, other than temporary electricity hookups and provided that the host person shall receive no compensation for such occupancy or use;
  3. Any such unit parked in the front yard shall have current state license plates or registration and must be kept in mobile condition.
- D. Projections into required yards.

1. Cornices, eaves, belt courses, sills, canopies or similar architectural features may extend or project into a required yard not more than 36 inches provided the width of such yard is not reduced to less than three feet;
2. Fireplace chimneys may project into a required front, side or rear yard not more than three feet provided the width of such yard is not reduced to less than three feet;
3. Open porches, decks or balconies not more than 36 inches in height and not covered by a roof or canopy, may extend or project into a required rear or side yard provided such natural yard area is not reduced to less than three feet and the deck is screened from abutting properties. Porches may extend into a required front yard not more than 36 inches;
4. Unroofed landings and stairs may project into required front or rear yards only.

E. Lot area for flag lots.

1. The lot area for a flag lot shall comply with the lot area requirements of the applicable zoning district;
2. The lot area shall be provided entirely within the building site area exclusive of any accessway (see figure following).



- F. Front yard determination. The owner or developer of a flag lot may determine the location of the front yard, provided no side yard setback area is less than 10 feet and provided the requirements of Section 18.730.010C, Building Heights and Flag Lots, are satisfied.

**Chapter 18.810**  
**STREET AND UTILITY IMPROVEMENT STANDARDS**

**Sections:**

<b>18.810.010</b>	<b>Purpose</b>
<b>18.810.020</b>	<b>General Provisions</b>
<b>18.810.030</b>	<b>Streets</b>
<b>18.810.040</b>	<b>Blocks</b>
<b>18.810.050</b>	<b>Easements</b>
<b>18.810.060</b>	<b>Lots</b>
<b>18.810.070</b>	<b>Sidewalks</b>
<b>18.810.080</b>	<b>Public Use Areas</b>
<b>18.810.090</b>	<b>Sanitary Sewers</b>
<b>18.810.100</b>	<b>Storm Drainage</b>
<b>18.810.110</b>	<b>Bikeways and Pedestrian Pathways</b>
<b>18.810.120</b>	<b>Utilities</b>
<b>18.810.130</b>	<b>Cash or Bond Required</b>
<b>18.810.140</b>	<b>Monuments</b>
<b>18.810.150</b>	<b>Installation Prerequisite</b>
<b>18.810.160</b>	<b>Installation Conformation</b>
<b>18.810.170</b>	<b>Plan Check</b>
<b>18.810.180</b>	<b>Notice to City</b>
<b>18.810.190</b>	<b>City Inspection</b>
<b>18.810.200</b>	<b>Engineer's Certification</b>
<b>18.810.210</b>	<b>Completion Requirements</b>

**18.810.010 Purpose**

- A. Purpose. The purpose of this chapter is to provide construction standards for the implementation of public and private facilities and utilities such as streets, sewers, and drainage.

**18.810.020 General Provisions**

- A. When standards apply. Unless otherwise provided, construction, reconstruction or repair of streets, sidewalks, curbs and other public improvements shall occur in accordance with the standards of this title. No development may occur and no land use application may be approved unless the public facilities related to development comply with the public facility requirements established in this section and adequate public facilities are available. Applicants may be required to dedicate land and build required public improvements only when the required exaction is directly related to and roughly proportional to the impact of the development.
- B. Standard specifications. The City Engineer shall establish standard specifications consistent with the application of engineering principles.
- C. Section 7.40 applies. The provision of Section 7.40 of the Tigard Municipal Code shall apply to this chapter.
- D. Adjustments. Adjustments to the provisions in this chapter related to street improvements may be granted by means of a Type II procedure, as governed by Section 18.390.040, using approval criteria in Section 18.370.030 C9. (Ord. 99-22)
- E. Except as provided in Section 18.810.030S, as used in this chapter, the term "streets" shall mean

"public streets" unless an adjustment under Section 18.810.020.D is allowed. (Ord. 99-22)

### **18.810.030 Streets**

#### **A. Improvements.**

1. No development shall occur unless the development has frontage or approved access to a public street.
2. No development shall occur unless streets within the development meet the standards of this chapter.
3. No development shall occur unless the streets adjacent to the development meet the standards of this chapter, provided, however, that a development may be approved if the adjacent street does not meet the standards but half-street improvements meeting the standards of this title are constructed adjacent to the development.
4. Any new street or additional street width planned as a portion of an existing street shall meet the standards of this chapter;
5. If the City could and would otherwise require the applicant to provide street improvements, the City Engineer may accept a future improvements guarantee in lieu of street improvements if one or more of the following conditions exist:
  - a. A partial improvement is not feasible due to the inability to achieve proper design standards;
  - b. A partial improvement may create a potential safety hazard to motorists or pedestrians;
  - c. Due to the nature of existing development on adjacent properties it is unlikely that street improvements would be extended in the foreseeable future and the improvement associated with the project under review does not, by itself, provide a significant improvement to street safety or capacity;
  - d. The improvement would be in conflict with an adopted capital improvement plan;
  - e. The improvement is associated with an approved land partition on property zoned residential and the proposed land partition does not create any new streets; or
  - f. Additional planning work is required to define the appropriate design standards for the street and the application is for a project which would contribute only a minor portion of the anticipated future traffic on the street.
6. The standards of this chapter include the standard specifications adopted by the City Engineer pursuant to Section 18.810.020.B.
7. The approval authority may approve adjustments to the standards of this chapter if compliance with the standards would result in an adverse impact on natural features such as wetlands, steep slopes, or existing mature trees. The approval authority may also approve adjustments to the standards of this chapter if compliance with the standards would have a substantial adverse impact on existing development or would preclude development on the property where the development is proposed. In approving an adjustment to the standards, the approval authority



shall balance the benefit of the adjustment with the impact on the public interest represented by the standards. In evaluating the impact on the public interest, the approval authority shall consider the criteria listed in Section 18.810.030 E.1. An adjustment to the standards may not be granted if the adjustment would risk public safety.

B. Creation of rights-of-way for streets and related purposes. Rights-of-way shall be created through the approval of a final subdivision plat or major partition; however, the Council may approve the creation of a street by acceptance of a deed, provided that such street is deemed essential by the Council for the purpose of general traffic circulation:

1. The Council may approve the creation of a street by deed of dedication without full compliance with the regulations applicable to subdivisions or major partitions if any one or more of the following conditions are found by the Council to be present:
  - a. Establishment of a street is initiated by the Council and is found to be essential for the purpose of general traffic circulation, and partitioning or subdivision of land has an incidental effect rather than being the primary objective in establishing the road or street for public use; or
  - b. The tract in which the road or street is to be dedicated is an isolated ownership of one acre or less and such dedication is recommended by the Commission to the Council based on a finding that the proposal is not an attempt to evade the provisions of this title governing the control of subdivisions or major partitions.
2. With each application for approval of a road or street right-of-way not in full compliance with the regulations applicable to the standards, the proposed dedication shall be made a condition of subdivision and major partition approval:
  - a. The applicant shall submit such additional information and justification as may be necessary to enable the Commission in its review to determine whether or not a recommendation for approval by the Council shall be made;
  - b. The recommendation, if any, shall be based upon a finding that the proposal is not in conflict with the purpose of this title;
  - c. The Commission in submitting the proposal with a recommendation to the Council may attach conditions which are necessary to preserve the standards of this title; and
3. All deeds of dedication shall be in a form prescribed by the City and shall name "the public," as grantee.

C. Creation of access easements. The approval authority may approve an access easement established by deed without full compliance with this title provided such an easement is the only reasonable method by which a lot large enough to develop can be created:

1. Access easements shall be provided and maintained in accordance with the Uniform Fire Code Section 10.207;
2. Access shall be in accordance with Sections 18.705.030.H and 18.705.030.I.

D. Street location, width and grade. Except as noted below, the location, width and grade of all streets shall conform to an approved street plan and shall be considered in their relation to existing and

planned streets, to topographic conditions, to public convenience and safety, and in their appropriate relation to the proposed use of the land to be served by such streets:

1. Street grades shall be approved by the City Engineer in accordance with Subsection M below; and
  2. Where the location of a street is not shown in an approved street plan, the arrangement of streets in a development shall either:
    - a. Provide for the continuation or appropriate projection of existing streets in the surrounding areas, or
    - b. Conform to a plan adopted by the Commission, if it is impractical to conform to existing street patterns because of particular topographical or other existing conditions of the land. Such a plan shall be based on the type of land use to be served, the volume of traffic, the capacity of adjoining streets and the need for public convenience and safety.
- E. Minimum rights-of-way and street widths. Unless otherwise indicated on an approved street plan, or as needed to continue an existing improved street, street right-of-way and roadway widths shall not be less than the minimum width described below. Where a range is indicated, the width shall be determined by the decision-making authority based upon anticipated average daily traffic (ADT) on the new street segment. (The City Council may adopt by resolution, design standards for street construction and other public improvements. The design standards will provide guidance for determining improvement requirements within the specified ranges.) These are presented in Table 18.810.1.
1. The decision-making body shall make its decision about desired right-of-way width and pavement width of the various street types within the subdivision or development after consideration of the following:
    - a. The type of road as set forth in the Comprehensive Plan Transportation Chapter - Functional Street Classification;
    - b. Anticipated traffic generation;
    - c. On-street parking needs;
    - d. Sidewalk and bikeway requirements;
    - e. Requirements for placement of utilities;
    - f. Street lighting;
    - g. Drainage and slope impacts;
    - h. Street tree location;
    - i. Planting and landscape areas;
    - j. Safety and comfort for motorists, bicyclists, and pedestrians;
    - k. Access needs for emergency vehicles.

**TABLE 18.810.1  
MINIMUM RIGHTS-OF-WAY AND STREET WIDTHS**

Type of Street	Right-of-Way Width (feet)	Roadway Width (feet)	Moving Lanes
Arterial	60'-90'	42' / lane	2-4
Major Collector	60'-80'	44'	2-4
Minor Collector	60'	40'	2-3
Local Street - Commercial and Industrial	50'	34'	2
Residential Access Streets			
a. Through street with:			
Less Than 1500 ADT	50'	32'	2
Less Than 500 ADT	46'	28'	1-2
Less Than 200 ADT	42'	24'	1-2
b. Cul-de-sac dead-end streets:			
Less Than 500 ADT	46'	28'	1-2
Less Than 200 ADT	42'	24'	1-2
(Cul-de-sacs shall be no more than 200 feet long and serve no more than 20 dwelling units)			
Turn-Arounds for Dead-end Streets in Industrial and Commercial Zones Only	50' radius	42' radius	1
Turn-Arounds for Cul-de-sac Dead-End Streets in Residential Zones Only	47' radius	40' radius	1
Alley: Residential	16'	16'	
Alley: Business or Industrial	20'	20'	

**Table 18.810.1**

**Minimum Widths for Street Characteristics**

<u>Type of Street</u>	<u>Right-of-Way Width (Ft)</u>	<u>Paved Width (Ft)</u>	<u>Number of Lanes</u>	<u>Min. Lane Width (Ft)</u>	<u>On-street Parking Width (Ft)</u>	<u>Bike Lane Width (Ft)</u>	<u>Sidewalk Width (Ft)</u>	<u>Landscape Strip Width (Ft) (exclusive of curb)</u>	<u>Median Width (Ft)</u>
<u>Arterial</u>	<u>64'-128'</u>	<u>Varies</u>	<u>2 - 7 (Refer to TSP)</u>	<u>12'</u>	<u>N/A</u>	<u>6' (New Streets)</u> <u>5'-6' (Existing Streets)</u>	<u>8' (Res. &amp; Ind. Zones)</u> <u>10' (Comm. Zones)</u>	<u>5'</u>	<u>12'<sup>(1)</sup></u>
<u>Collector</u>	<u>58'-96'</u>	<u>Varies</u>	<u>2 - 5 (Refer to TSP)</u>	<u>11'</u>	<u>N/A</u>	<u>6' (New Streets)</u> <u>5'-6' (Existing Streets)</u>	<u>6' (Res. &amp; Ind. Zones)</u> <u>8' (Comm. Zones)</u>	<u>5'</u>	<u>12'<sup>(1)</sup></u>
<u>Neighborhood Route</u>	<u>50'-58'</u>	<u>28'-36'</u>	<u>2</u>	<u>10'</u>	<u>8'</u>	<u>5'-6'</u>	<u>5'-6'<sup>(2)</sup></u>	<u>5'</u>	<u>N/A</u>
<u>Local:</u>									
<u>Industrial/Commercial</u>	<u>50'</u>	<u>36'</u>	<u>2</u>			<u>N/A</u>	<u>5'-6'<sup>(2)</sup></u>	<u>5'</u>	<u>N/A</u>
<u>Local: Residential</u>									<u>N/A</u>
• <u>Under 1500 ADT</u>	<u>54'/50'<sup>(3)</sup></u>	<u>32'/28'<sup>(3)</sup></u>	<u>2</u>		<u>8' (both sides)</u>	<u>N/A</u>	<u>5'-6'<sup>(2)</sup></u>	<u>5'</u>	
• <u>Under 500 ADT</u>	<u>50'/46'<sup>(3)</sup></u>	<u>28'/24'<sup>(3)</sup></u>	<u>2</u>		<u>8' (one side)</u>	<u>N/A</u>			
• <u>Under 200 ADT</u>	<u>46'/42'<sup>(3)</sup></u>	<u>24'/20'<sup>(3)</sup></u>	<u>2</u>		<u>(No Parking)</u>	<u>N/A</u>			
<u>Cul-de-sac bulbs in Industrial and Commercial zones</u>	<u>50' radius</u>	<u>42' radius</u>	<u>N/A</u>	<u>N/A</u>		<u>N/A</u>			<u>N/A</u>
<u>Cul-de-sac bulbs in Residential zones</u>	<u>47' radius</u>	<u>40' radius</u>	<u>N/A</u>	<u>N/A</u>		<u>N/A</u>		<u>N/A</u>	<u>N/A</u>
<u>Alley: Residential</u>	<u>16'</u>	<u>16'</u>			<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Alley: Business</u>	<u>20'</u>	<u>20'</u>			<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

<sup>1</sup> Medians required for 5 and 7 lane roadways. They are optional for 3 lane roadways.

<sup>2</sup> Sidewalk widths for these streets shall be 5 ft with landscape strip; 6 ft if against curb (if permitted in accordance with 18.810.070.C).

<sup>3</sup> "Skinny Street" roadway widths are permitted where cross section and review criteria are met. Refer to corresponding cross sections (Figures 18.810.3, 18.810.4 and 18.810.5) for details and conditions.

Figure 18.810.1  
 Arterials Sample Cross Sections

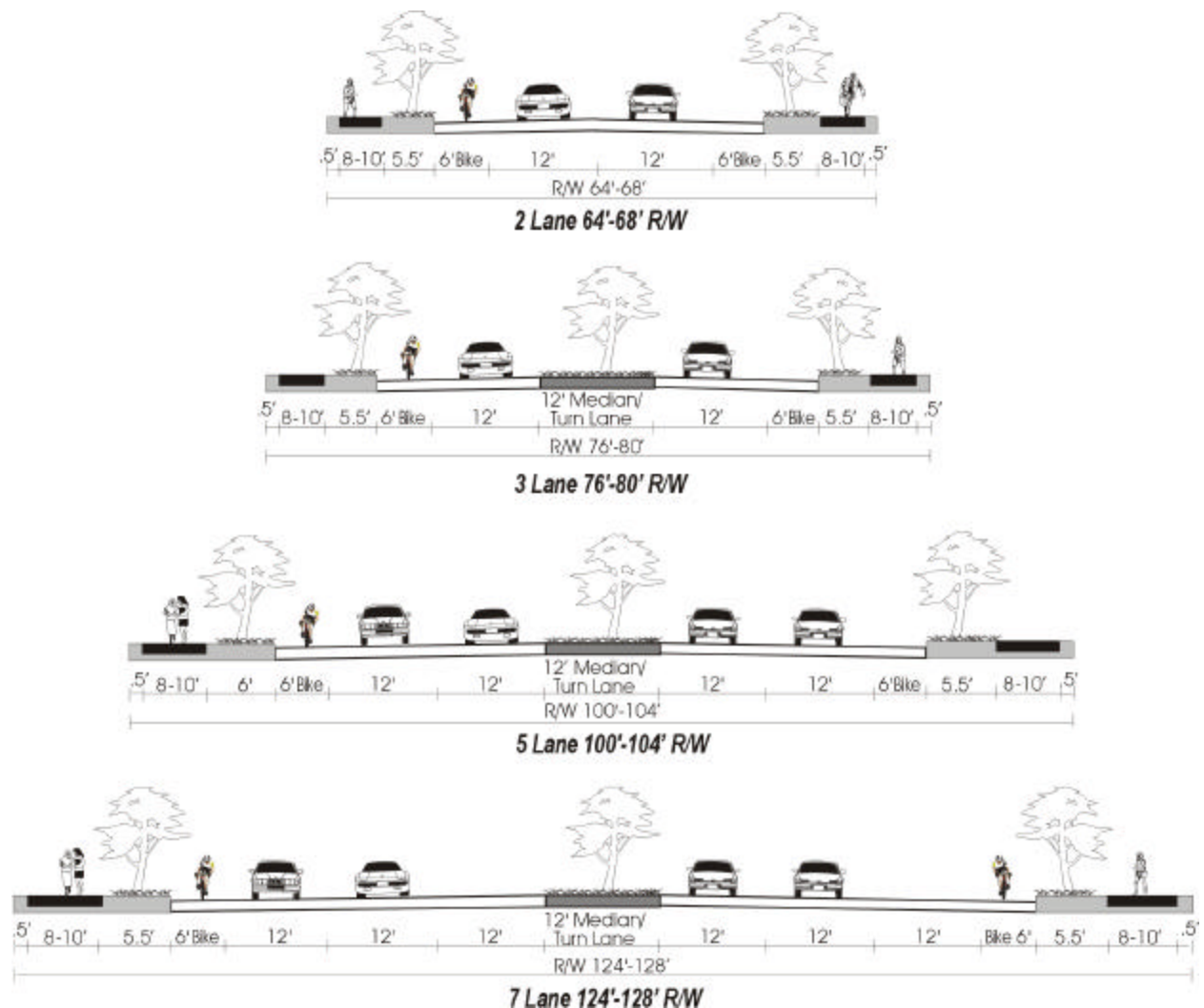


Figure 18.810.2  
Collector Sample Cross Sections

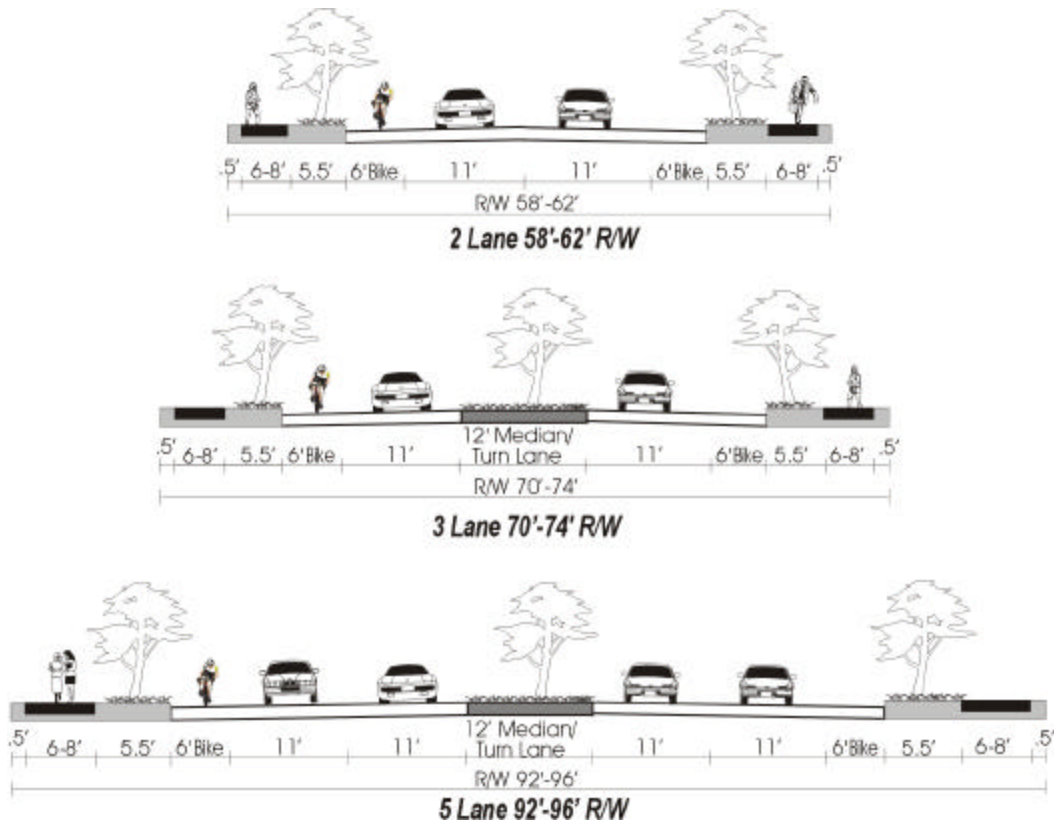


Figure 18.810.3  
Neighborhood Routes  
Sample Cross Sections

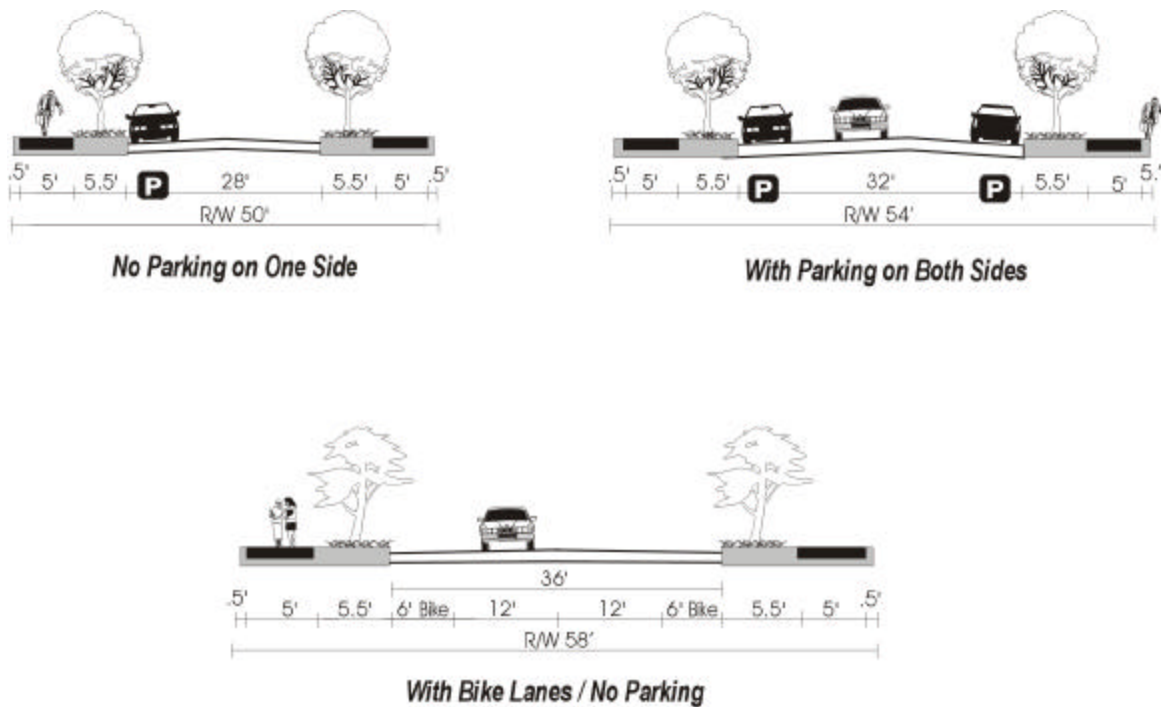


Figure 18.810.4  
Local Residential Streets - <1,500 vpd

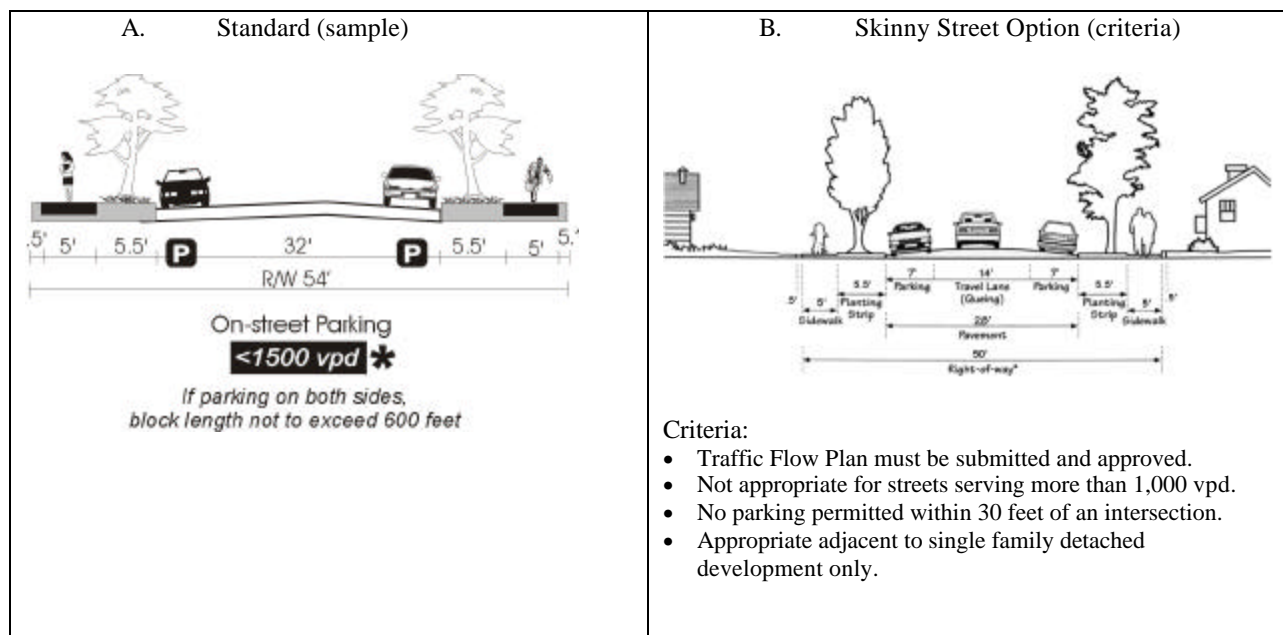


Figure 18.810.5  
Local Residential Streets < 500 vpd

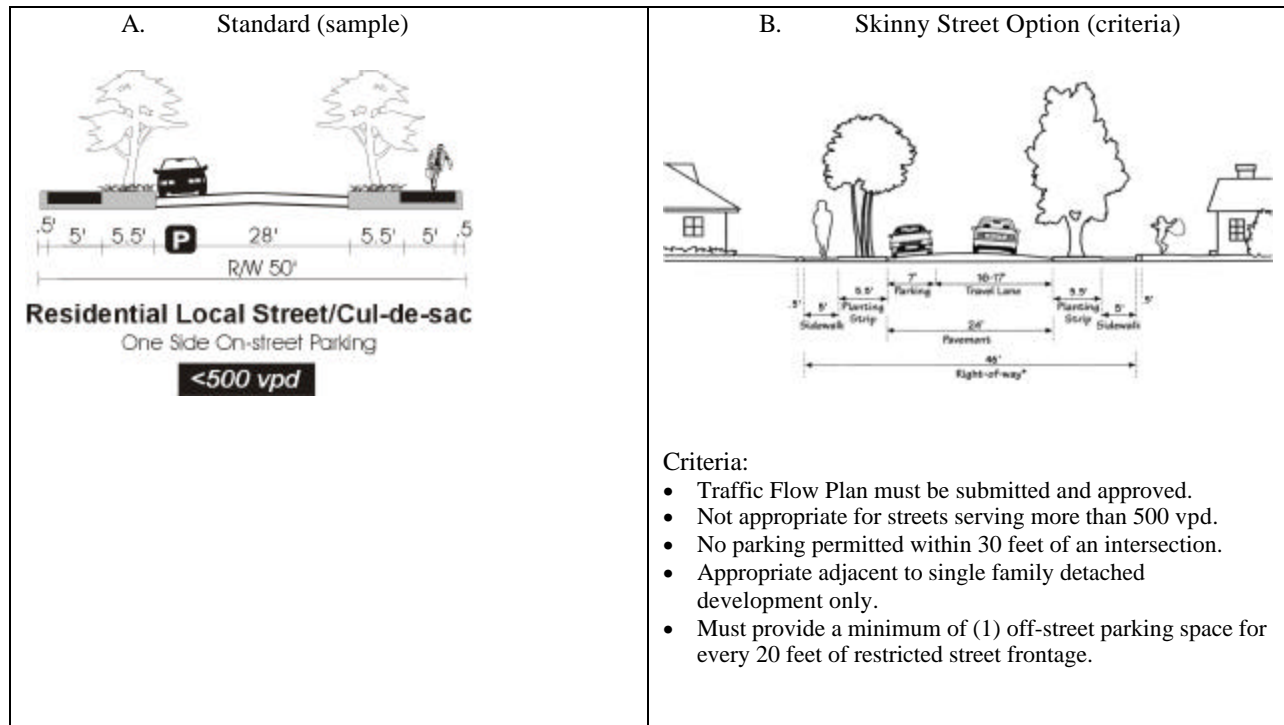
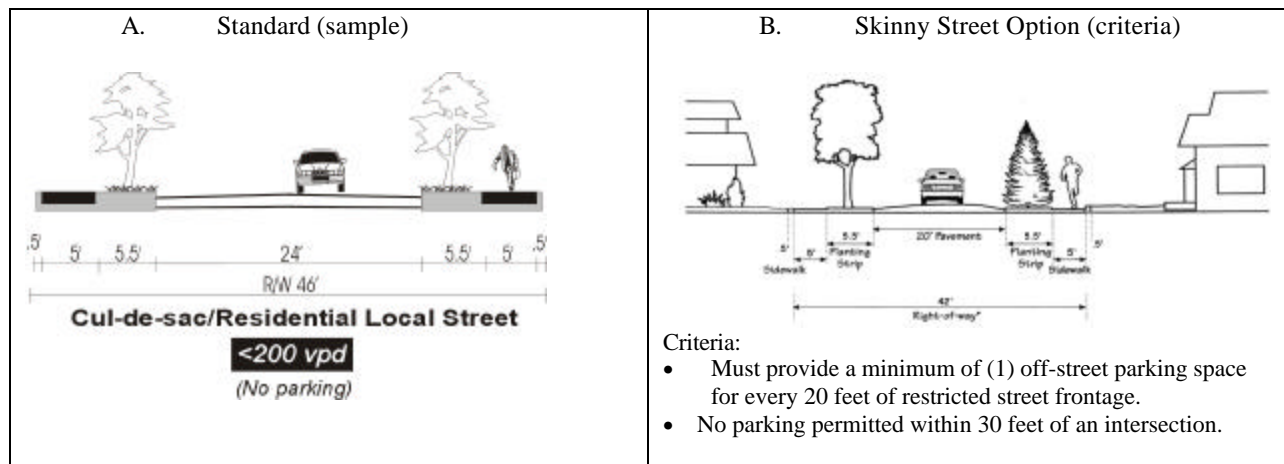


Figure 18.810.6  
Local Residential Street < 200 vpd



F. Future street plan and extension of streets.

1. A future street plan shall:

- Be filed by the applicant in conjunction with an application for a subdivision or partition. The plan shall show the pattern of existing and proposed future streets from the boundaries of the proposed land division and shall include other parcels within 530 feet surrounding and adjacent to the proposed land division. At the applicant's request, the City ~~shall~~ may prepare a future streets proposal. Costs of the City preparing a future streets proposal shall be



- reimbursed for the time involved. A street proposal may be modified when subsequent subdivision proposals are submitted.
- b. Identify existing or proposed bus routes, pullouts or other transit facilities, bicycle routes and pedestrian facilities on or within 530 feet of the site.
2. Where necessary to give access or permit a satisfactory future division of adjoining land, streets shall be extended to the boundary lines of the tract to be developed, and
    - a. These extended streets or street stubs to adjoining properties are not considered to be culs-de-sac since they are intended to continue as through streets at such time as the adjoining property is developed.
    - b. A barricade shall be constructed at the end of the street by the property owners which shall not be removed until authorized by the City Engineer, the cost of which shall be included in the street construction cost.
    - c. Temporary hammerhead turnouts or temporary cul-de-sac bulbs shall be constructed for stub street in excess of 150 feet in length.

G. Street spacing and access management. Refer to 18.705.030.H.

GH. Street alignment and connections.

1. Full street connections with spacing of no more than 530 feet between connections is required except where prevented by barriers such as topography, railroads, freeways, pre-existing developments, lease provisions, easements, covenants or other restrictions existing prior to May 1, 1995 which preclude street connections. A full street connection may also be exempted due to a regulated water feature if regulations would not permit construction.
- ~~1. Staggering of streets making "T" intersections at collectors and arterials shall not be designed so that jogs of less than 300 feet on such streets are created, as measured from the centerline of such street.~~
- ~~2. Spacing between local street intersections shall have a minimum separation of 125 feet.~~
23. All local ~~and minor~~, neighborhood routes and collector streets which abut a development site shall be extended within the site to provide through circulation when not precluded by environmental or topographical constraints, existing development patterns or strict adherence to other standards in this code. A street connection or extension is considered precluded when it is not possible to redesign or reconfigure the street pattern to provide required extensions. Land is considered topographically constrained if the slope is greater than 15% for a distance of 250 feet or more. In the case of environmental or topographical constraints, the mere presence of a constraint is not sufficient to show that a street connection is not possible. The applicant must show why the constraint precludes some reasonable street connection.
34. Proposed street or street extensions shall be located to provide direct access to existing or planned transit stops, commercial services, and other neighborhood facilities, such as schools, shopping areas and parks.
45. All developments should provide an internal network of connecting streets that provide short, direct travel routes and minimize travel distances within the development.

HI. Intersection angles. Streets shall be laid out so as to intersect at an angle as near to a right angle as practicable, except where topography requires a lesser angle, but in no case shall the angle be less than 75° unless there is special intersection design, and:

1. Streets shall have at least 25 feet of tangent adjacent to the right-of-way intersection unless topography requires a lesser distance;
2. Intersections which are not at right angles shall have a minimum corner radius of 20 feet along the right-of-way lines of the acute angle; and
3. Right-of-way lines at intersection with arterial streets shall have a corner radius of not less than 20 feet.

IJ. Existing rights-of-way. Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or development.

JK. Partial Street Improvements. Partial street improvements resulting in a pavement width of less than 20 feet; while generally not acceptable, may be approved where essential to reasonable development when in conformity with the other requirements of these regulations, and when it will be practical to require the improvement of the other half when the adjoining property developed.

KL. Culs-de-sacs. A cul-de-sac shall be no more than 200 feet long shall not provide access to greater than 20 dwelling units, and shall only be used when environmental or topographical constraints, existing development pattern, or strict adherence to other standards in this code preclude street extension and through circulation:

1. All culs-de-sac shall terminate with a turnaround. Use of turnaround configurations other than circular, shall be approved by the City Engineer; and
2. The length of the cul-de-sac shall be measured from the centerline intersection point of the two streets to the radius point of the bulb, along the centerline of the roadway from the near side of the intersecting street to the farthest point of the cul-de-sac.
3. If a cul-de-sac is more than 300 feet long, a lighted direct pathway to an adjacent street may be required to be provided and dedicated to the City.

LM. Street names. No street name shall be used which will duplicate or be confused with the names of existing streets in Washington County, except for extensions of existing streets. Street names and numbers shall conform to the established pattern in the surrounding area and as approved by the City Engineer.

MN. Grades and curves.

1. Grades shall not exceed ten percent on arterials, 12% on collector streets, or 12% on any other street (except that local or residential access streets may have segments with grades up to 15% for distances of no greater than 250 feet), and:

~~—12. Centerline radii of curves shall be as determined by the City Engineer, not be less than 700 feet on arterials, 500 feet on major collectors, 350 feet on minor collectors, or 100 feet on other streets; and~~

~~—2. Streets intersecting with a minor collector or greater functional classification street, or streets~~

~~intended to be posted with a stop sign or signalization, shall provide a landing averaging five percent or less. Landings are that portion of the street within 20 feet of the edge of the intersecting street at full improvement.~~

**NO.** Curbs, curb cuts, ramps, and driveway approaches. Concrete curbs, curb cuts, wheelchair, bicycle ramps and driveway approaches shall be constructed in accordance with standards specified in this chapter and Section 15.04.080; and:

1. Concrete curbs and driveway approaches are required; except
2. Where no sidewalk is planned, an asphalt approach may be constructed with City Engineer approval; and
3. Asphalt and concrete driveway approaches to the property line shall be built to City configuration standards.

**OP.** Streets adjacent to railroad right-of-way. Wherever the proposed development contains or is adjacent to a railroad right-of-way, provision shall be made for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land. The distance shall be determined with due consideration at cross streets or the minimum distance required for approach grades and to provide sufficient depth to allow screen planting along the railroad right-of-way in nonindustrial areas.

**PQ.** Access to arterials and ~~major~~ collectors. Where a development abuts or is traversed by an existing or proposed arterial or ~~major~~ collector street, the development design shall provide adequate protection for residential properties and shall separate residential access and through traffic, or if separation is not feasible, the design shall minimize the traffic conflicts. The design shall include any of the following:

1. A parallel access street along the arterial or ~~major~~ collector;
2. Lots of suitable depth abutting the arterial or ~~major~~ collector to provide adequate buffering with frontage along another street;
3. Screen planting at the rear or side property line to be contained in a nonaccess reservation along the arterial or ~~major~~ collector; or
4. Other treatment suitable to meet the objectives of this subsection;
5. If a lot has access to two streets with different classifications, primary access should be from the lower classification street.

**QR.** Alleys, public or private.

1. Alleys shall be no less than 20 feet in width. In commercial and industrial districts, alleys shall be provided unless other permanent provisions for access to off-street parking and loading facilities are made.
2. While alley intersections and sharp changes in alignment shall be avoided, the corners of necessary alley intersections shall have a radius of not less than 12 feet.

**RS.** Survey monuments. Upon completion of a street improvement and prior to acceptance by the City, it

shall be the responsibility of the developer's registered professional land surveyor to provide certification to the City that all boundary and interior monuments shall be reestablished and protected.

**ST. Private Streets.**

1. Design standards for private streets shall be established by the City Engineer; and
2. The City shall require legal assurances for the continued maintenance of private streets, such as a recorded maintenance agreement.
3. Private streets serving more than six dwelling units are permitted only within planned developments, mobile home parks, and multi-family residential developments.

**TU. Railroad crossings.** Where an adjacent development results in a need to install or improve a railroad crossing, the cost for such improvements may be a condition of development approval, or another equitable means of cost distribution shall be determined by the public works Director and approved by the Commission.

**UV. Street signs.** The City shall install all street signs, relative to traffic control and street names, as specified by the City Engineer for any development. The cost of signs shall be the responsibility of the developer.

**W. Mailboxes.** Joint mailbox facilities shall be provided in all residential developments, with each joint mailbox serving at least two dwelling units.

1. Joint mailbox structures shall be placed adjacent to roadway curbs;
2. Proposed locations of joint mailboxes shall be designated on a copy of the preliminary plat or development plan, and shall be approved by the City Engineer/US Post Office prior to final plan approval; and
3. Plans for the joint mailbox structures to be used shall be submitted for approval by the City Engineer/US Post Office prior to final approval.

**WX. Traffic signals.** The location of traffic signals shall be noted on approved street plans. Where a proposed street intersection will result in an immediate need for a traffic signal, a signal meeting approved specifications shall be installed. The cost shall be included as a condition of development.

**XY. Street light standards.** Street lights shall be installed in accordance with regulations adopted by the City's direction.

**YZ. Street name signs.** Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.

**ZAA. Street cross-sections.** The final lift of asphalt concrete pavement shall be placed on all new constructed public roadways prior to final City acceptance of the roadway and within one year of the conditional acceptance of the roadway unless otherwise approved by the City Engineer. The final lift shall also be placed no later than when 90% of the structures in the new development are completed or three years from the commencement of initial construction of the development, whichever is less.

1. Sub-base and leveling course shall be of select crushed rock;

2. Surface material shall be of Class C or B asphaltic concrete;
3. The final lift shall be placed on all new construction roadways prior to City final acceptance of the roadway; however, not before 90% of the structures in the new development are completed unless three years have elapsed since initiation of construction in the development;
4. The final lift shall be Class C asphaltic concrete as defined by A.P.W.A. standard specifications; and
5. No lift shall be less than 1-1/2 inches in thickness. (Ord. 99-22)

AB      Traffic Calming. When, in the opinion of the City Engineer, the proposed development will create a negative traffic condition on existing neighborhood streets, such as excessive speeding, the developer may be required to provide traffic calming measures. These measures may be required within the development and/or offsite as deemed appropriate. As an alternative, the developer may be required to deposit funds with the City to help pay for traffic calming measures that become necessary once the development is occupied and the City Engineer determines that the additional traffic from the development has triggered the need for traffic calming measures. The City Engineer will determine the amount of funds required, and will collect said funds from the developer prior to the issuance of a certificate of occupancy, or in the case of subdivision, prior to the approval of the final plat. The funds will be held by the City for a period of five (5) years from the date of issuance of certificate of occupancy, or in the case of a subdivision, the date of final plat approval. Any funds not used by the City within the five-year time period will be refunded to the developer.

AC.      Traffic study

1. A traffic study shall be required for all new or expanded uses or developments under any of the following circumstances:
  - a. when they generate a 10% or greater increase in existing traffic to high collision intersections identified by Washington County.
  - b. Trip generations from development onto the City street at the point of access and the existing ~~adt~~ADT fall within the following ranges:

<u>Existing ADT</u>	<u>ADT to be added by development</u>
<u>0-3,000 vpd</u>	<u>2,000 vpd</u>
<u>3,001-6,000 vpd</u>	<u>1,000vpd</u>
<u>&gt;6,000 vpd</u>	<u>500 vpd or more</u>

- c. If any of the following issues become evident to the City engineer:
  - (1) High traffic volumes on the adjacent roadway that may affect movement into or out of the site,
  - (2) Lack of existing left-turn lanes onto the adjacent roadway at the proposed access drive(s)
  - (3) Inadequate horizontal or vertical sight distance at access points
  - (4) The proximity of the proposed access to other existing drives or intersections is a potential hazard
  - (5) The proposal requires a conditional use permit or involves a drive-through operation
  - (6) The proposed development may result in excessive traffic volumes on adjacent local streets.
2. In addition, a traffic study may be required for all new or expanded uses or developments under any of the following circumstances:
  - a. when the site is within 500 feet of an ODOT facility and/or
  - b. trip generation from a development adds 300 or more vehicle trips per day to an ODOT facility

and/or

c. trip generation from a development adds 50 or more peak hour trips to an ODOT facility.

#### **18.810.040 Blocks**

- A. Block Design. The length, width and shape of blocks shall be designed with due regard to providing adequate building sites for the use contemplated, consideration of needs for convenient access, circulation, control and safety of street traffic and recognition of limitations and opportunities of topography.
- B. Sizes.
1. The perimeter of blocks formed by streets shall not exceed 2,000~~1,800~~ feet measured along the centerline of the streets~~right-of-way line~~ except:
    - a. Where street location is precluded by natural topography, wetlands or other bodies of water, or pre-existing development; or
    - b. For blocks adjacent to arterial streets, limited access highways, ~~major~~ collectors or railroads.
    - c. For non-residential blocks in which internal public circulation provides equivalent access.
  2. Bicycle and pedestrian connections on public easements or right-of-ways shall be provided when full street connection is ~~not possible~~exempted by B.1 above. Spacing between connections shall be no more than 330 feet, except where precluded by environmental or topographical constraints, existing development patterns, or strict adherence to other standards in the code.

#### **18.810.050 Easements**

- A. Easements. Easements for sewers, drainage, water mains, electric lines or other public utilities shall be either dedicated or provided for in the deed restrictions, and where a development traversed by a watercourse, or drainageway, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the watercourse.
- B. Utility easements. A property owner proposing a development shall make arrangements with the City, the applicable district and each utility franchise for the provision and dedication of utility easements necessary to provide full services to the development. The City's standard width for public main line utility easements shall be 15 feet unless otherwise specified by the utility company, applicable district, or City Engineer.

#### **18.810.060 Lots**

- A. Size and shape. Lot size, width, shape and orientation shall be appropriate for the location of the development and for the type of use contemplated, and:
1. No lot shall contain part of an existing or proposed public right-of-way within its dimensions;
  2. The depth of all lots shall not exceed 2-1/2 times the average width, unless the parcel is less than 1-1/2 times the minimum lot size of the applicable zoning district;
  3. Depth and width of properties zoned for commercial and industrial purposes shall be adequate to provide for the off-street parking and service facilities required by the type of use proposed.

- B. Lot frontage. Each lot shall abut upon a public or private street, other than an alley, for a width of at least 25 feet unless the lot is created through a minor land partition in which case Subsection 18.162.050 (C) applies, or unless the lot is for an attached single-family dwelling unit, in which case the lot frontage shall be at least 15 feet.
- C. Through lots. Through lots shall be avoided except where they are essential to provide separation of residential development from major traffic arterials or to overcome specific disadvantages of topography and orientation, and:
  - 1. A planting buffer at least ten feet wide is required abutting the arterial rights-of-way; and
  - 2. All through lots shall provide the required front yard setback on each street.
- D. Lot side lines. The side lines of lots, as far as practicable, shall be at right angles to the street upon which the lots front.
- E. Large lots. In dividing tracts into large lots or parcels which at some future time are likely to be redivided, the Commission may require that the lots be of such size and shape, and be so divided into building sites, and contain such site restrictions as will provide for the extension and opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size. The land division shall be denied if the proposed large development lot does not provide for the future division of the lots and future extension of public facilities.

#### **18.810.070 Sidewalks**

A. ~~A.~~ Sidewalks. All industrial streets and private streets shall have sidewalks meeting City standards along at least one side of the street. All other streets shall have sidewalks meeting City standards along both sides of the street. A development may be approved if an adjoining street has sidewalks on the side adjoining the development, even if no sidewalk exists on the other side of the street

#### B. Requirement of developers

1. As part of any development proposal, or change in use resulting in an additional 1,000 vehicle trips or more per day, an applicant shall be required to identify direct, safe (1.25 x the straight line distance) pedestrian routes within 1/2 mile of their site to all transit facilities and Neighborhood Activity Centers (schools, parks, libraries, etc.). In addition, the developer may be required to participate in the removal of any gaps in the pedestrian system off-site if justified by the development.

2. If there is an existing sidewalk, on the same side of the street as the development, within 300 feet of a development site in either direction, the sidewalk shall be extended from the site to meet the existing sidewalk, subject to rough proportionality (even if the sidewalk does not serve a neighborhood activity center).

~~BC.~~ Planter strip requirements. A planter strip separation of at least five feet between the curb and the sidewalk shall be required in the design of any arterial or collector streets where parking is prohibited adjacent to the curb, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant portions of the street; ~~or~~ it would conflict with the utilities, there are significant natural features (large trees, water features, etc) that would be destroyed if the sidewalk were located as required, or where there are existing structures in close proximity to the street (15 feet or less). Additional consideration for exempting the planter strip requirement may be given on a case by case basis if a property abuts more than one street frontage.



**ED.** Sidewalks in central business district. In the central business district, sidewalks shall be 10 feet in width, and:

1. All sidewalks shall provide a continuous unobstructed path; and
2. The width of curbside sidewalks shall be measured from the back of the curb.

**DE.** Maintenance. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner.

**EF.** Application for permit and inspection. If the construction of a sidewalk is not included in a performance bond of an approved subdivision or the performance bond has lapsed, then every person, firm or corporation desiring to construct sidewalks as provided by this chapter, shall, before entering upon the work or improvement, apply for a street opening permit to the Engineering department to so build or construct:

1. An occupancy permit shall not be issued for a development until the provisions of this section are satisfied.
2. The City Engineer may issue a permit and certificate allowing temporary noncompliance with the provisions of this section to the owner, builder or contractor when, in his opinion, the construction of the sidewalk is impractical for one or more of the following reasons:
  - a. Sidewalk grades have not and cannot be established for the property in question within a reasonable length of time;
  - b. Forthcoming installation of public utilities or street paving would be likely to cause severe damage to the new sidewalk;
  - c. Street right-of-way is insufficient to accommodate a sidewalk on one or both sides of the street; or
  - d. Topography or elevation of the sidewalk base area makes construction of a sidewalk impractical or economically infeasible; and
3. The City Engineer shall inspect the construction of sidewalks for compliance with the provision set forth in the standard specifications manual.

**FG.** Council initiation of construction. In the event one or more of the following situations are found by the Council to exist, the Council may adopt a resolution to initiate construction of a sidewalk in accordance with City ordinances:

1. A safety hazard exists for children walking to or from school and sidewalks are necessary to eliminate the hazard;
2. A safety hazard exists for pedestrians walking to or from a public building, commercial area, place of assembly or other general pedestrian traffic, and sidewalks are necessary to eliminate the hazard;
3. 50% or more of the area in a given block has been improved by the construction of dwellings, multiple dwellings, commercial buildings or public buildings and/or parks; and



4. A criteria which allowed noncompliance under Section E.1.b above no longer exists and a sidewalk could be constructed in conformance with City standards. (Ord. 99-22)

#### **18.810.080 Public Use Areas**

##### **A. Dedication requirements.**

1. Where a proposed park, playground or other public use shown in a development plan adopted by the City is located in whole or in part in a subdivision, the Commission may require the dedication or reservation of such area within the subdivision, provided that the reservation or dedication is roughly proportional to the impact of the subdivision on the park system.
2. Where considered desirable by the Commission in accordance with adopted comprehensive plan policies, and where a development plan of the City does not indicate proposed public use areas, the Commission may require the dedication or reservation of areas within the subdivision or sites of a character, extent and location suitable for the development of parks or other public use, provided that the reservation or dedication is roughly proportional to the impact of the subdivision on the park system.

- B. Acquisition by public agency. If the developer is required to reserve land area for a park, playground, or other public use, such land shall be acquired by the appropriate public agency within 18 months following plat approval, at a price agreed upon prior to approval of the plat, or such reservation shall be released to the subdivider. (Ord. 99-22)

#### **18.810.090 Sanitary Sewers**

- A. Sewers required. Sanitary sewers shall be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments) and the adopted policies of the comprehensive plan.
- B. Sewer plan approval The City Engineer shall approve all sanitary sewer plans and proposed systems prior to issuance of development permits involving sewer service.
- C. Over-sizing. Proposed sewer systems shall include consideration of additional development within the area as projected by the Comprehensive Plan.
- D. Permits denied. Development permits may be restricted by the Commission or Hearings Officer where a deficiency exists in the existing sewer system or portion thereof which cannot be rectified within the development and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of the sewage treatment system.

#### **18.810.100 Storm Drainage**

- A. General provisions. The Director and City Engineer shall issue a development permit only where adequate provisions for storm water and flood water runoff have been made, and:
1. The storm water drainage system shall be separate and independent of any sanitary sewerage system;

2. Where possible, inlets shall be provided so surface water is not carried across any intersection or allowed to flood any street; and
  3. Surface water drainage patterns shall be shown on every development proposal plan.
- B. Easements. Where a development is traversed by a watercourse, drainageway, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of such watercourse and such further width as will be adequate for conveyance and maintenance.
- C. Accommodation of upstream drainage. A culvert or other drainage facility shall be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the development, and:
1. The City Engineer shall approve the necessary size of the facility, based on the provisions of Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments).
- D. Effect on downstream drainage. Where it is anticipated by the City Engineer that the additional runoff resulting from the development will overload an existing drainage facility, the Director and Engineer shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with the Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments).

#### **18.810.110 Bikeways and Pedestrian Pathways**

##### A. ~~A.~~ Bikeway extension.

1. As a standard, bike lanes shall be required along all Arterial and Collector routes and where identified on the City's adopted bicycle plan in the Transportation System Plan (TSP).
2. Developments adjoining proposed bikeways identified on the City's adopted pedestrian/bikeway plan shall include provisions for the future extension of such bikeways through the dedication of easements or rights-of-way, provided such dedication is directly related to and roughly proportional to the impact of the development.
3. Any new street improvement project shall include bicycle lanes as required in this document and on the adopted bicycle plan.

- B. Cost of construction. Development permits issued for planned unit developments, conditional use permits, subdivisions and other developments which will principally benefit from such bikeways shall be conditioned to include the cost or construction of bikeway improvements in an amount roughly proportional to the impact of the development.

##### C. Minimum width.

1. Minimum width for bikeways within the roadway is five feet per bicycle travel lane.
2. Minimum width ~~for two-way bikeways~~ multi-use paths separated from the road is ~~eight-ten~~ (10) feet. The width may be reduced to eight (8) feet if there are environmental or other constraints.
3. The minimum width for pedestrian only off-street paths is five (5) feet.
4. Design standards for bike and pedestrian-ways shall be determined by the City Engineer.

## **18.810.120 Utilities**

- A. Underground utilities. All utility lines including, but not limited to those required for electric, communication, lighting and cable television services and related facilities shall be placed underground, except for surface mounted transformers, surface mounted connection boxes and meter cabinets which may be placed above ground, temporary utility service facilities during construction, high capacity electric lines operating at 50,000 volts or above, and:
1. The developer shall make all necessary arrangements with the serving utility to provide the underground services;
  2. The City reserves the right to approve location of all surface mounted facilities;
  3. All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and
  4. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.
- B. Information on development plans. The applicant for a development shall show on the development plan or in the explanatory information, easements for all underground utility facilities, and:
1. Plans showing the location of all underground facilities as described herein shall be submitted to the City Engineer for review and approval; and
  2. Care shall be taken in all cases to ensure that above ground equipment does not obstruct vision clearance areas for vehicular traffic.
- C. Exception to under-grounding requirement.
1. The developer shall pay a fee in-lieu of under-grounding costs when the development is proposed to take place on a street where existing utilities which are not underground will serve the development and the approval authority determines that the cost and technical difficulty of under-grounding the utilities outweighs the benefit of undergrounding in conjunction with the development. The determination shall be on a case-by-case basis. The most common, but not the only, such situation is a short frontage development for which undergrounding would result in the placement of additional poles, rather than the removal of above-ground utilities facilities.
  2. An applicant for a development which is served by utilities which are not underground and which are located across a public right-of-way from the applicant's property shall pay the fee in-lieu of undergrounding.
  3. Properties within the CBD zoning district shall be exempt from the requirements for undergrounding of utility lines and from the fee in-lieu of undergrounding.
  4. The exceptions in Subsections 1 through 3 of this section shall apply only to existing utility lines. All new utility lines shall be placed underground.
- D. Fee in-lieu of undergrounding.

1. The City Engineer shall establish utility service areas in the City. All development which occurs within a utility service area shall pay a fee in-lieu of undergrounding for utilities if the development does not provide underground utilities, unless exempted by this code.
2. The City Engineer shall establish the fee by utility service area which shall be determined based upon the estimated cost to underground utilities within each service area. The total estimated cost for undergrounding in a service area shall be allocated on a front-foot basis to each party within the service area. The fee due from any developer shall be calculated based on a front-foot basis.
3. A developer shall receive a credit against the fee for costs incurred in the undergrounding of existing overhead utilities. The City Engineer shall determine the amount of the credit, after review of cost information submitted by the applicant with the request for credit.
4. The funds collected in each service area shall be used for undergrounding utilities within the City at large. The City Engineer shall prepare and maintain a list of proposed undergrounding projects which may be funded with the fees collected by the City. The list shall indicate the estimated timing and cost of each project. The list shall be submitted to the City Council for their review and approval annually.

#### **18.810.130 Cash or Bond Required**

- A. Guarantee. All improvements installed by the developer shall be guaranteed as to workmanship and material for a period of one year following acceptance by the City Council.
- B. Cash deposit or bond. Such guarantee shall be secured by cash deposit or bond in the amount of the value of the improvements as set by the City Engineer.
- C. Compliance requirements. The cash or bond shall comply with the terms and conditions of Section 18.430.090.

#### **18.810.140 Monuments**

- A. Replacement required. Any monuments that are disturbed before all improvements are completed by the subdivider shall be replaced prior to final acceptance of the improvements.

#### **18.810.150 Installation Prerequisite**

- A. Approval required. No public improvements, including sanitary sewers, storm sewers, streets, sidewalks, curbs, lighting or other requirements shall be undertaken except after the plans have been approved by the City, permit fee paid, and permit issued.
- B. Permit fee. The permit fee is required to defray the cost and expenses incurred by the City for construction and other services in connection with the improvement. The permit fee shall be set by Council resolution.

#### **18.810.160 Installation Conformation**

- A. Conformance required. In addition to other requirements, improvements installed by the developer either as a requirement of these regulations or at his own option, shall conform to the requirements of this chapter and to improvement standards and specifications followed by the City.
- B. Adopted installation standards. The Standard Specifications for Public Works Construction, Oregon

Chapter A.P.W.A., and Design and Construction Standards for Sanitary and Surface Water Management (as adopted by the Unified Sewerage Agency in 1996 and including any future revisions or amendments) shall be a part of the City's adopted installation standard(s); other standards may also be required upon recommendation of the City Engineer.

**18.810.170 Plan Check**

- A. Submittal requirements. Work shall not begin until construction plans and construction estimates have been submitted and checked for adequacy and approved by the City Engineer in writing. The developer can obtain detailed information about submittal requirements from the City Engineer.
- B. Compliance. All such plans shall be prepared in accordance with requirements of the City.

**18.810.180 Notice to City**

- A. Commencement. Work shall not begin until the City has been notified in advance.
- B. Resumption. If work is discontinued for any reason, it shall not be resumed until the City is notified.

**18.810.190 City Inspection**

- A. Inspection of improvements. Improvements shall be constructed under the inspection and to the satisfaction of the City. The City may require changes in typical sections and details if unusual conditions arising during construction warrant such changes in the public interest.

**18.810.200 Engineer's Certification**

- A. Written certification required. The developer's engineer shall provide written certification of a form provided by the City that all improvements, workmanship and materials are in accord with current and standard engineering and construction practices, and are of high grade, prior to City acceptance of the subdivision's improvements or any portion thereof for operation and maintenance.

**18.810.210 Completion Requirements (To be completed.)**

## ADDITIONAL AMENDMENTS

### 18.120.030

Add the following definitions in alphabetical order and renumber the remaining definitions accordingly:

“Neighborhood Activity Center” – A use such as schools, parks, libraries, shopping areas, employment centers or pools which provide recreational or social services for groups of people.

“Traffic Flow Plan” – A plan submitted with a proposal for skinny streets that shows the potential queuing pattern that will allow for safe and efficient travel of emergency vehicles, service vehicles and passenger vehicles with minimal disturbance. This may include a combination of strategic driveway locations, turnouts or other mechanisms which will foster safe and efficient travel.

### 18.360.090.A.11.a

change from:

Provisions within the plan shall be included for providing for transit if the development proposal is adjacent to existing or proposed transit route

change to:

Provisions within the plan shall be included for providing for transit if the development proposal is adjacent to or within 500 feet of existing or proposed transit route

### 18.520.020.B

change the 3<sup>rd</sup> sentence from:

Separated from other commercially-zoned areas by at least one-half mile, community commercial centers are intended to serve several residential neighborhoods, ideally at the intersection of two or more major collector streets.....

change to:

Separated from other commercially-zoned areas by at least one-half mile, community commercial centers are intended to serve several residential neighborhoods, ideally at the intersection of two or more major collector streets.....

### 18.530.050.A.2

change from:

The site shall have access to be approved by the City Engineer to an arterial or major collectors street.....

change to:

The site shall have access to be approved by the City Engineer to an arterial or ~~major~~ collector street.....

**18.745.050.C.2.b**

change from:

Are permitted up to six feet in height in front yards adjacent to any designated arterial, major collector or minor collector street.

change to:

Are permitted up to six feet in height in front yards adjacent to any designated arterial, ~~major collector~~ or ~~minor~~ collector street.

## TPR Compliance Matrix

### Exhibit B

Attached are the TPR requirements with an explanation of how they are addressed in the existing City of Tigard Development Code and in the proposed amendments.

(Where there is a dashed line- it indicates that there is not a standard to be addressed, just an intro in to the standards.)

660-12-0045 TPR Requirement	How Addressed in current code	Proposed amendments
(3) Local governments shall adopt land use or subdivision regulations for urban areas and rural communities as set forth below. The purposes of this section are to provide for safe and convenient pedestrian, bicycle and vehicular circulation consistent with access management standards and the function of affected streets, to ensure that new development provides on-site streets and accessways that provide reasonably direct routes for pedestrian and bicycle travel in areas where pedestrian and bicycle travel is likely if connections are provided, and which avoids wherever possible levels of automobile traffic which might interfere with or discourage pedestrian or bicycle travel.	_____	_____
(a) Bicycle parking facilities as part of new multi-family residential developments of four units or more, new retail, office and institutional developments, and all transit transfer stations and park-and-ride lots;	18.765.050.E states the minimum parking requirements for all use types. This is required as part of any land use review.	
(b) On-site facilities shall be provided which accommodate safe and convenient pedestrian and bicycle access from within new subdivisions, multi-family developments, planned developments, shopping centers, and commercial districts to adjacent residential areas and transit stops, and to neighborhood activity centers within one-half	18.765.050 provides bike parking design standards  18.705.030.F (Access, Egress and Circulation – required walkway location) addresses walkway requirements for multi-family,	18.810.070 is being amended to include a requirement of the developer to show connections to neighborhood activity centers within ½ mile of development and require consideration of improvement requirements depending on proportionality. The amendment also required the removal of gaps in the sidewalk within 300 feet on



660-12-0045 TPR Requirement	How Addressed in current code	Proposed amendments
<p>mile of the development. Single-family residential developments shall generally include streets and accessways. Pedestrian circulation through parking lots should generally be provided in the form of accessways.</p>	<p>industrial or commercial development.</p> <p>18.810.040 (Street and Utility Improvement Standards – Blocks) addresses pedestrian connections when full street connections are not possible</p> <p>18.810.070 (sidewalks) requires all public streets to have sidewalks</p>	<p>the same side of the street as a development (subject to rough proportionality).</p>
<p>(A) "Neighborhood activity centers" includes, but is not limited to, existing or planned schools, parks, shopping areas, transit stops or employment centers;</p>		<p>18.120.030 is being amended to include a definition of Neighborhood Activity Center.</p>
<p>(B) Bikeways shall be required along arterials and major collectors. Sidewalks shall be required along arterials, collectors and most local streets in urban areas, except that sidewalks are not required along controlled access roadways, such as freeways;</p>	<p>Sidewalks currently are required along all public streets. Development code does not have a bike lane requirement but refers to the City's comprehensive plan.</p>	<p>18.810.110.A is amended to include the requirement that bike lanes be located on all arterials and collectors and any additional routes identified in the TSP for any new construction or improvement project.</p>
<p>(C) Cul-de-sacs and other dead-end streets may be used as part of a development plan, consistent with the purposes set forth in this section;</p>	<p>18.810.030.K regulated cul-de-sacs and states that they can't be more than 200 feet long. IF a variance is granted and the cul-de-sac is greater than 300 feet, pedestrian connections are required. This is in addition to the block length standards which may also require additional pedestrian connections through a block.</p>	

660-12-0045 TPR Requirement	How Addressed in current code	Proposed amendments
(D) Local governments shall establish their own standards or criteria for providing streets and accessways consistent with the purposes of this section. Such measures may include but are not limited to: standards for spacing of streets or accessways; and standards for excessive out-of-direction travel;	18.810 establishes standards that regulate street spacing and block lengths intending on limiting out of direction travel.	There are amendments which address street spacing and block lengths, however, they continue to limit out-of-direction travel and provide greater clarification to increase efficiency and safety.
(E) Streets and accessways need not be required where one or more of the following conditions exist: (i) Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided; (ii) Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or (iii) Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995 which preclude a required street or accessway connection.	18.810.040 – Block length standards provide for this exception in the standard.	
(c) Where off-site road improvements are otherwise required as a condition of development approval, they shall include facilities accommodating convenient pedestrian and bicycle travel, including bicycle ways along arterials and major collectors;	Any road is required to be constructed to the standards called for in our code. As shown within this matrix, the code requires sidewalks but additional amendments have been made to	

660-12-0045 TPR Requirement	How Addressed in current code	Proposed amendments
	define required bikeway locations.	
<p>(d) For purposes of subsection (b) "safe and convenient" means bicycle and pedestrian routes, facilities and improvements which:</p> <p>(A) Are reasonably free from hazards, particularly types or levels of automobile traffic which would interfere with or discourage pedestrian or cycle travel for short trips;</p> <p>(B) Provide a reasonably direct route of travel between destinations such as between a transit stop and a store; and</p> <p>(C) Meet travel needs of cyclists and pedestrians considering destination and length of trip; and considering that the optimum trip length of pedestrians is generally 1/4 to 1/2 mile.</p>	<p>The City's Municipal code prohibits obstructions on public sidewalks</p> <p>The access standards, block length standards and requirement for sidewalks provides a reasonably direct route of travel between destinations and meets the travel needs of cyclists and pedestrians</p>	<p>In addition, an amendment is proposed to have the developer review routes within 300 feet (approximately 1/4 mile) from the development site and, if proportional, make necessary improvements to complete "gaps"</p>
<p>(e) Internal pedestrian circulation within new office parks and commercial developments shall be provided through clustering of buildings, construction of accessways, walkways and similar techniques.</p>	18.705.030.F requires walkways within commercial developments	
<p>(4) To support transit in urban areas containing a population greater than 25,000, where the area is already served by a public transit system or where a determination has been made that a public transit system is feasible, local governments shall adopt land use and subdivision regulations as provided in (a)-(f) below:</p>	_____	_____
<p>(a) Transit routes and transit facilities shall be designed to support transit use through provision of bus stops, pullouts and shelters, optimum road geometrics, on-road parking</p>	SDR standards 18.360.090.11 requires development to provide transit amenities as required by	

660-12-0045 TPR Requirement	How Addressed in current code	Proposed amendments
restrictions and similar facilities, as appropriate;	tri-met during the development review (if proportional and justified)	
<p>(b) New retail, office and institutional buildings at or near major transit stops shall provide for convenient pedestrian access to transit through the measures listed in (A) and (B) below.</p> <p>(A) Walkways shall be provided connecting building entrances and streets adjoining the site;</p> <p>(B) Pedestrian connections to adjoining properties shall be provided except where such a connection is impracticable as provided for in OAR 660-012-0045(3)(b)(E). Pedestrian connections shall connect the on site circulation system to existing or proposed streets, walkways, and driveways that abut the property. Where adjacent properties are undeveloped or have potential for redevelopment, streets, accessways and walkways on site shall be laid out or stubbed to allow for extension to the adjoining property;</p> <p>(C) In addition to (A) and (B) above, on sites at major transit stops provide the following:</p> <p>(i) Either locate buildings within 20 feet of the transit stop, a transit street or an intersecting street or provide a pedestrian plaza at the transit stop or a street intersection;</p> <p>(ii) A reasonably direct pedestrian connection between the transit stop and building entrances on the site;</p> <p>(iii) A transit passenger landing pad</p>	<p>18.705.030.f</p> <p>18.810.070 – sidewalks</p> <p>18.360.090.11 requires consideration of transit facility improvements as part of development review (which covers ii to v). Building placement standards are already in place in the Tigard Triangle and as part of the Washington Square Regional Center. Additional standards for building</p>	



660-12-0045 TPR Requirement	How Addressed in current code	Proposed amendments
(g) Along existing or planned transit routes, designation of types and densities of land uses adequate to support transit.	Existing zoning along transit routes is transit supportive – no changes are needed	
<p>(5) In MPO areas, local governments shall adopt land use and subdivision regulations to reduce reliance on the automobile which:</p> <p>(a) Allow transit oriented developments (TODs) on lands along transit routes;</p> <p>(b) Implements a demand management program to meet the measurable standards set in the TSP in response to 660-012-0034(4).</p>	The Tigard Triangle area, Washington Square Regional Center area and Central Business District zone have provisions for mixed use development and street and design standards which encourage transit oriented development	
(6) In developing a bicycle and pedestrian circulation plan as required by 660-012-0020(2)(d), local governments shall identify improvements to facilitate bicycle and pedestrian trips to meet local travel needs in developed areas. Appropriate improvements should provide for more direct, convenient and safer bicycle or pedestrian travel within and between residential areas and neighborhood activity centers (i.e., schools, shopping, transit stops). Specific measures include, for example, constructing walkways between cul-de-sacs and adjacent roads, providing walkways between buildings, and providing direct access between adjacent uses.	TSP provides bike and pedestrian master plan. The development code currently requires walkways and sidewalks, however we need to amend the code to specifically require if shown on the pedestrian or bikeway plan.	Proposed amendments specifically require pedestrian or bike improvements if shown on the pedestrian or bikeway plan, if roughly proportional.
(7) Local governments shall establish standards for local streets and accessways that minimize pavement width and total right-of-way consistent with the operational needs of the facility. The intent of this requirement is that local	Current code required pavement width between 24' and 32' for local streets (actual width depends on ADT and whether	The TSP, which provides the foundation for the amendments being proposed, was developed with the help of a Citizen Task Force and Technical Advisory Committee and involved several public

660-12-0045 TPR Requirement	How Addressed in current code	Proposed amendments
<p>governments consider and reduce excessive standards for local streets and accessways in order to reduce the cost of construction, provide for more efficient use of urban land, provide for emergency vehicle access while discouraging inappropriate traffic volumes and speeds, and which accommodate convenient pedestrian and bicycle circulation. Not withstanding subsection (1) or (3) of this section, local street standards adopted to meet this requirement need not be adopted as land use regulations.</p>	<p>parking is provided on the street) and up to 12 feet per lane for arterial streets</p>	<p>information meetings to gather input and comments and 2 formal public hearings. After the development and adoption of the TSP, a group of City Staff from Planning and Engineering and a representative from Tualatin Valley Fire and Rescue met over several months to develop code language to implement the TSP. The discussions included the TPR “skinny street” requirement. After review and discussion, it was determined that the safe harbor widths were acceptable, provided a traffic flow plan was submitted to verify that the distribution of driveways, no parking areas, etc would allow efficient queuing and traffic flow as the State’s “Neighborhood Streets Design Guidelines” assumed. Additional assurances were needed to ensure that adequate off-street parking was provided for streets that had parking on one side only. It was determined that the existing width standards would remain for those that did not want to submit a traffic flow plan or provide additional assurances for off-street parking, but the option to go to narrower streets would be provided as well. While technically, the wider street width is the default because no additional documentation is required, both street width standards are acceptable and available for developments on local streets.</p>

**PLANNING COMMISSION RECOMMENDATION  
TO THE  
TIGARD CITY COUNCIL**



**SECTION I: APPLICATION SUMMARY**

**FILE NAME:** TRANSPORTATION SYSTEM PLAN

**CASES:** Zone Ordinance Amendment (ZOA) 2002-00004

**PROPOSAL:** The proposal is to formally adopt Development Code standards to fully implement the Transportation System Plan (TSP) that was adopted in January 2002.

**APPLICANT:** City of Tigard  
13121 SW Hall Boulevard  
Tigard, OR 97223

**LOCATION:** All areas within the City of Tigard.

**APPLICABLE  
REVIEW**

**CRITERIA:** Oregon's Statewide Planning Goals 1, 2 and 12; Oregon Administrative Rule 660; Metro Regional Transportation Plan (RTP); Comprehensive Plan Policies 1.1.1(a), 2.1.1, 8.1.1, 8.1.2, 8.1.3, 8.1.5 and 8.2.3, and Community Development Code Chapter 18.380.020 and 18.390.060.G.

**SECTION II: PLANNING COMMISSION RECOMMENDATION:**

The Planning Commission moved to forward the Development Code amendments to implement the Transportation System Plan (TSP) to the City Council as shown in Exhibit A-1 through A-4, and in the summary of proposed changes, based on the findings that all relevant criteria are satisfied. The TPR compliance matrix (Exhibit B) and this recommendation report provide the analysis and findings which demonstrate compliance with all relevant criteria.



### **SECTION III: BACKGROUND INFORMATION**

The City of Tigard began looking at updating the Transportation System Plan (TSP) several years ago. With the help of a 12 member task force, agencies and staff, a draft TSP was produced which takes into account the existing traffic conditions in Tigard, community needs and goals and the anticipated future demands on the transportation system. The TSP and Comprehensive Plan amendments were adopted by the City Council in January 2002. An additional step necessary to fully implement the TSP was developing amendments to the Development Code to reflect changes to the TSP. The Planning Commission and City Council held work sessions on the proposed Development Code amendments in June. The proposed changes reflect the comments received at the work sessions. The Planning Commission held a public hearing on August 5, 2002. No testimony was offered at the hearing. As an addition to the Planning Commission's motion to forward the amendments to the City Council, the Commission recommended that staff provide a presentation to the CIT prior to the Council's public hearing. In accordance with the Commission's recommendation, a CIT presentation is scheduled for the September 5, 2002 meeting prior to the Council's September 10, 2002 hearing.

### **SECTION IV. SUMMARY OF APPLICABLE CRITERIA**

**Chapter 18.380 states that legislative text amendments shall be undertaken by means of a Type IV procedure, as governed by Section 18.390.060G.**

**Chapter 18.390.060G states that the recommendation by the Commission and the decision by the Council shall be based on consideration of the following factors:**

- A. The Statewide Planning Goals and Guidelines adopted under Oregon Revised Statutes Chapter 197;**
- B. Any federal or state statutes or regulations found applicable;**
- C. Any applicable Metro regulations;**
- D. Any applicable Comprehensive Plan Policies; and**
- E. Any applicable provisions of the City's implementing ordinances.**

### **SECTION V: APPLICABLE REVIEW CRITERIA AND FINDINGS**

#### **STATEWIDE GOALS**

**Citizen Involvement: Goal 1 requires a citizen involvement program that ensures the opportunity for citizens to be involved in the planning process.**

Tigard Comprehensive Plan Policy 2.1.1 and Tigard Community Development Code Chapter 18.390 provide for citizen participation and notice. Notice of the Planning Commission and City Council hearings and opportunity for response was advertised in the local newspaper. Notice was sent to Department of Land Conservation and Development in accordance with their notice requirements. This goal is satisfied.

**Land Use Planning:** Goal 2 requires, in part, that adopted comprehensive plans be revised to take into account changing public policies and circumstances.

This goal is met because the City has applied all relevant Statewide Planning Goals, City Comprehensive Plan policies and Community Development Code requirements in the review of this proposal as discussed throughout this staff report.

**Transportation:** Goal 12 requires a safe, convenient and economic transportation system.

The TSP has been prepared in accordance with the Statewide Planning Goals and requirements. Oregon Administrative Rule 666, the compliance with which is discussed further in this report, implements the Statewide Transportation Goal 12. The plan has been reviewed by ODOT and DLCD.

## **COMPLIANCE WITH FEDERAL AND STATE STATUTES OR GUIDELINES**

**Oregon Administrative Rule:** Section 660-12-0000 through 0070 is intended to implement Statewide Planning Goal #12 by providing guidelines for local governments to demonstrate compliance with Goal #12 through their Transportation System Plans.

When the TSP was adopted, it was recognized that Development Code amendments were needed to fully comply with the TPR. Attached as Exhibit B is a chart identifying how each of the TPR requirements are addressed. Based on the information provided in Exhibit B and in this section, staff finds that the TSP complies with the state statutes. There are no specific federal standards that apply.

## **COMPLIANCE WITH METRO REGULATIONS**

**Regional Transportation Plan (RTP):** The RTP takes the place of Metro Functional Plan Title 6 (Regional Accessibility), and is consistent with Chapter 2 of the Regional Framework Plan. The RTP provides a regional framework for transportation systems and has its own criteria that must be addressed that are in addition to the Transportation Planning Rule (TPR) requirements.

The TSP is consistent with the RTP and the proposed amendments include all language required to be adopted by local jurisdictions. The only specific language that needed to be changed to implement the RTP was the requirement to have local street spacing no less than 530 feet apart to address connectivity requirements.

## **COMPLIANCE WITH COMPREHENSIVE PLAN POLICIES**

**General Policies:** Policy 1.1.1(a) requires that legislative changes are consistent with statewide planning goals and the regional development plan.

The proposal is consistent with statewide planning goals as addressed above under 'Statewide Goals'. The proposal conforms with the applicable portions of the Metro

Functional Plan that was approved for adoption on October 24, 1996 by the Metro Council. This policy is satisfied.

**Citizen Involvement:** Policy 2.1.1 states that the City shall maintain an ongoing citizen involvement program and shall assure that citizens will be provided an opportunity to be involved in all phases of the planning process. Policy 2.1.2 states that opportunities for citizen involvement shall be appropriate to the scale of the planning effort. Policy 2.1.3 states that the City shall ensure that the information on planning issues is available in an understandable format.

A request for comments was sent to all affected jurisdictions and agencies. The Planning Commission hearing was legally advertised with notice published in the Tigard Times. The TSP had extensive notice and opportunities to comment. Because the current proposal is simply an implementation of a previously adopted plan, the same level of public notice is not necessary.

**Transportation:** Transportation Policies 8.1.1, 8.1.2, 8.1.3, 8.1.5 and 8.2.3 were adopted at the same time the TSP was adopted to incorporate the TSP recommendations into the Comprehensive Plan. The policies are specifically addressed below:

**8.1.1 – requires the planning of transportation facilities to be done in a way that enhances livability through the proper location of facilities, encouraging pedestrian traffic and addressing issues of through traffic and speeding on local residential streets.**

**8.1.2 – requires a balanced transportation system that incorporates all modes of transportation.**

**8.1.3 – requires the effort be made to develop a safe transportation system through the street standards and access management policies.**

**8.1.5 – requires the development of transportation facilities that are accessible to all citizens and minimize out-of-direction travel.**

**8.2.3 – provides the minimum improvement level and dedication that should be required of developers as a precondition of development to ensure that the community's transportation system functions adequately.**

The code amendments provide greater clarification of where bike lanes are required, requires the identification and removal of gaps in sidewalks (if roughly proportional), has local street spacing standards that will minimize out-of-direction travel, provide greater access spacing standards and greater clarification of when transit amenities are required.

The proposed development code amendment changes are directly implementing the TSP and Comprehensive Plan policies, therefore, the applicable Comprehensive Plan standards have been satisfied.

### **COMPLIANCE WITH THE CITY'S IMPLEMENTING ORDINANCES:**

The implementing ordinances are contained in the Tigard Community Development Code. The applicable criteria identified in the Development Code are summarized in Section IV – Summary of Applicable Criteria and addressed in Section V – Applicable Review Criteria and Findings. As this staff report demonstrates, all applicable criteria have been satisfied.

### **SECTION VI: COMMENTS (AGENCY, STAFF AND OTHER)**

City of Tigard Engineering, City of Tigard Current Planning Division, City of Tigard Operations, City of Tigard Public Works, City of Tigard Police, City of Beaverton, City of Durham, City of King City, Washington County, Tigard-Tualatin School District, and Tri-met have reviewed the proposal and offered no comments or objections.

**Tualatin Valley Fire and Rescue** reviewed the proposed amendments and indicated that they find no conflicts with their interests. The provisions for skinny streets are acceptable to the Fire District. They also state that the Fire District is currently developing traffic calming device design criteria that will be submitted upon completion. The general statement in the Development Code indicates only when they are to be installed. The Fire District hopes that their criteria will be considered for design details.

**DLCD** reviewed the proposed amendments and offered comments which are summarized below:

- They want to make sure that Tigard documents its process used to develop the local street standards regarding narrow streets;
- They suggested changes which have been incorporated into the proposed amendments that presents the narrow street option in a way that does not discourage someone from using that method and as a method that is not favored.
- They provided suggested language which has been incorporated into the proposed amendments for “Traffic Flow Plan” (formerly referred to as a queuing plan).
- They recommend against changing the block length standard from 1,800 feet to 2,120 feet and provided language that Washington County uses that they suggest we consider.

Staff response: The change from 1,800 foot block length to 2,120 foot block length was suggested to be consistent with the street spacing standards, however staff is not opposed to retaining the original block length concept. Because the measurement system is being changed from right-of-way line to centerline, the maximum block length dimension will be 2,000 feet. This will result roughly in the same block length requirement as currently existing and as recommended by DLCD staff.

**Metro** reviewed the proposed amendments and generally offered the same comments as DLCD, specifically, they suggested changes that present the narrow street option in a way that does not discourage someone from using that method and as a method that is not

avored and they recommend against changing the block length standard from 1,800 feet to 2,120 feet.

**The City of Tigard Urban Forester** reviewed the proposed changes and offered the following comments: “The planter strips should be at least five feet wide so that large trees can be planted in order to create more tree canopy. I think that planter strips are a good idea since the trees will be shading much more of the street, thus reducing the heat island effect too common in this City!”

**Oregon Department of Transportation (ODOT)** reviewed the proposed amendments and offered comments summarized as follows: They appreciate our efforts to clarify when a traffic study is required, however a traffic study is not always needed to address ODOT interests. They suggest changing 18.810.030.AC to state that a traffic study MAY (instead of shall) be required if a site is within 500 feet of an ODOT facility and/or trip generation from the development adds 300 or more trips per day to an ODOT facility and/or trip generation from the development adds 50 or more peak hour trips to an ODOT facility. They request that ODOT be notified of pre-applications to help make the determination of whether a traffic study is required prior to a formal application being submitted and deemed complete.

Staff response: The proposed development code language has been amended to include ODOT’s recommended changes

EXHIBITS:

EXHIBIT A-1 through A-5: Proposed Development Code changes

EXHIBIT B: Chart addressing TPR criteria and Tigard’s compliance status

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PREPARED BY:     Julia Hajduk,  
                          Associate Planner

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DATE

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SIGNED:             Mark Padgett  
                          Planning Commission Chair

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DATE

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